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The American Artisan
And Hardware Record

Vol. 50. No. 8. CHICAGO, AUGUST 26, 1905. $2.00 Per Year.

BOMMER SPRING HINGES
(ESTABL. 1876.)
BOMMER BROTHERS, MF'RS. ARE THE BEST 256 to 276 CLASSON AVE. BROOKLYN, N.Y.

Bolts, Carriage Forgings, Etc.

Catalog and Prices on Application

COLUMBUS BOLT WORKS, Columbus, Ohio.

Always On Top

Any weak spot in your roofs should be attended to now. A leaky roof can cause an immense loss on short notice. **American Seal Elastic Oil Cement** is sure cure. If your roof is old and cannot be soldered this is the one thing to use. American Seal Roof Paints, Metallic and Graphite, preserve and protect. None better, none just as good. Prices are right even if the quality is the very best.

Agencies:
THE PERKINS ROOFING & SUPPLY CO.
235 Lake St., CHICAGO, ILL.
STOCKHOFF SUPPLY CO., 107 N. Main St., ST. LOUIS, MO.

"NIAGARA"

CHAINS
ONEIDA COMMUNITY
ONEIDA, N. Y

This Space for Sale. Inquire of Daniel Stern, 69 Dearborn St., Chicago.

THE ATLAS BOLT & SCREW CO.

CLEVELAND, O.

STOVE BOLTS, RIVETS, RODS
And Kindred Articles

Catalogue and Prices on Application

BLACK DIAMOND FILES and RASPS

TRADE MARK
PERFECT—ALWAYS

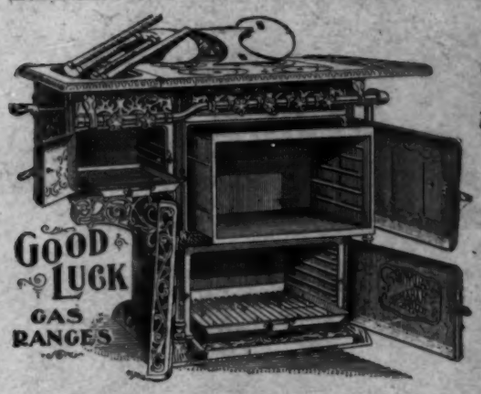
Twelve Medals Awarded at International Expositions
Copy of Catalogue will be sent free to any interested file user upon application.

G. & H. BARNETT COMPANY
Black Diamond File Works PHILADELPHIA

BROWN WELDLESS COW TIES
Twice as strong as welded chain.

A sample (full length) delivered for **one cent.** Any Retail Dealer sending postal card request with name of Jobber secures sample prepaid.

Sole Manufacturers
The Bridgeport Chain Co., Bridgeport, Conn.



We want all the people in the Natural Gas Belt from Kansas to Texas to know that

Good Luck Cinderella and Tremont Gas Ranges

will burn the kind of natural gas they have without waste or annoyance.

They never sweat walls or windows.

They never "fire back" or give off offensive odors.

They are the only ranges built with a flue connection with each burner.

They have held the Pennsylvania, West Virginia and Ohio markets against all kinds of competition including imitation for 15 years and they are constantly growing in greater favor.

Retail prices, $13.00 to $60.00; over 100 styles in steel and cast iron to select from. Catalogue free.

Pittsburgh Stove & Range Co.

PITTSBURGH, PA.

Do you value your reputation—do you endeavor to increase your circle of satisfied customers?

Of course you do.

Then why not take the exclusive agency in your vicinity for the CLERMONT Air-Tight Hot Blast—a heater that invariably gives complete satisfaction to every purchaser.

If you will send us your name and address, we will mail you our descriptive matter—and outline the details of our Agency Proposition.

The CLERMONT burns slack, soft coal, or lignite without smoking or puffing, the perpendicular openings in the Fire Bowl insure perfect combustion and admit air evenly on all sides of the fire—there's the secret of the CLERMONT'S wonderful success.

But ask for our circulars and prices!

Gem City Stove Co.

DAYTON, OHIO

Moore's Stoves Always Please

MOORE'S Air-Tight Heater

The Everlasting Fire-Pot

A STANDBY

¶ Fourteen years of continuously increasing popularity has made Moore's Air-Tight Heater a standby in thousands of homes, and its reputation is still young.

¶ This remarkable design and construction is one of those successful combinations that is so nearly right that it never grows old. It stands alone among stove patterns with a style of its own—a style that is so good that it lasts and the more you see it the better you like it.

¶ The Everlasting Fire-Pot used in Moore's Air-Tight Heater, with its gas consuming side inlets, burns up everything but the ashes and is practically indestructible. We shall be glad to talk over with you this and many other points which have helped to make Moore's Air-Tight Heater a leader in THE EASY LINE TO SELL.

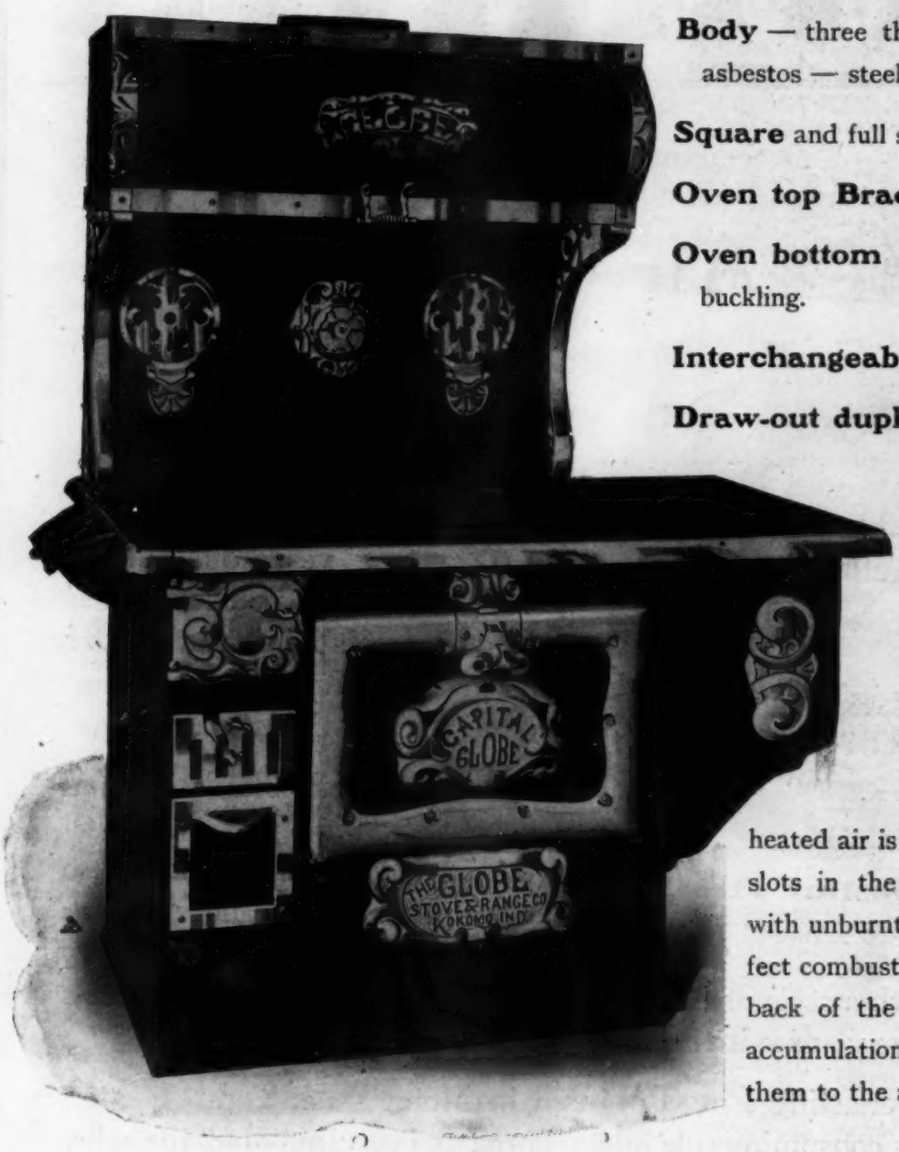
JOLIET STOVE WORKS,
JOLIET, ILLINOIS.

93

Capital Globe Range

MADE IN KOKOMO

A new medium priced range that has proven a deserved favorite with the trade



Body — three thicknesses — steel — asbestos — steel.

Square and full sized oven.

Oven top Brace of special design.

Oven bottom guaranteed against buckling.

Interchangeable top plates.

Draw-out duplex grate, &c.

Special nickel process finish.

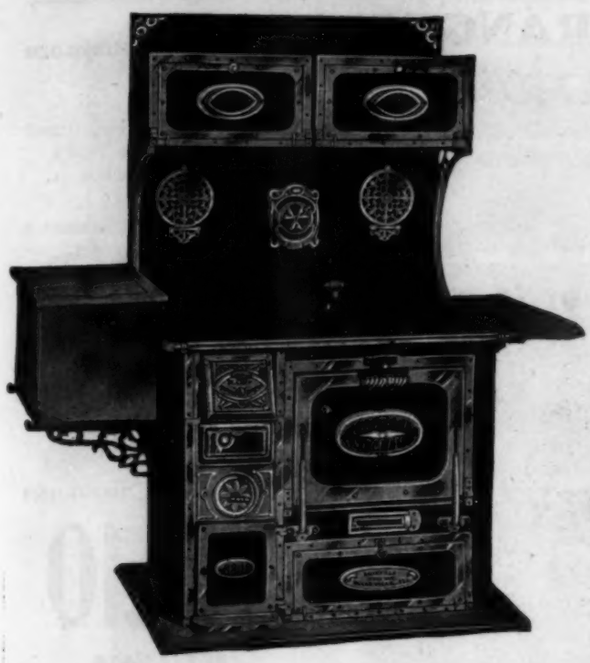
The Hot Blast Fire Box can be completely removed in thirty seconds. It has a heavy sectional lining. Superheated air is jetted through the slots in the linings and mixed with unburnt gas, producing perfect combustion. An air chamber back of the lining prevents the accumulation of ashes and guides them to the ash pan.

WRITE FOR CATALOGUE

We make Steel Ranges, Steel Cooks, Heating Stoves, Hotel Ranges, and Outfits

The Globe Stove & Range Co.

Kokomo, Indiana



Malleable St. Clair Steel Range

Made in 16-in. and 18-in. ovens.
Any combination desired.

Write for Our New 1905-6 Catalogue — Just Issued

St. Clair Steel Range

High Grade.
15-in., 17-in., 19-in. and 22-in. ovens.

"ST. CLAIR"

Stoves and Ranges

NONE BETTER MADE

Our line of Malleable Ranges and Steel Ranges is very complete and our prices are right.

Art St. Clair Steel Range

14-in., 16-in. and 18-in. ovens.

St. Clair Stoves and Ranges are fully guaranteed to give entire satisfaction in every respect.

Belleville Stove Works, Belleville, Ill.

The following agencies carry a full line of our goods in stock for distribution:

KELLOGG & STOKES STOVE CO., Denver, Colo.
For Colorado, Wyoming and New Mexico.

POWELL & SMITH, Tacoma, Wash.
For Western Washington, Alaska and British Columbia.

BELLEVILLE STOVE WORKS, Kansas City, Mo.
For Kansas City, Western Missouri and Kansas.

JOHN KONTNY, 65-67 N. Desplaines St., Chicago.
For Northern Illinois, Wisconsin and Minnesota.

MATCHLESS STEEL RANGES!

Stimulators for Dull Business

Combine WEIGHT, STYLE, FINISH and WORKMANSHIP

The kind you should handle to meet competition.

We want one good dealer in every town.

No. 118N

in aluminum trimmings,

$15.30

NET 15 DAYS

Compare sizes, weights and prices with other lines.

We don't sell datings. Our terms are net cash 15 days.

Our line shown all the year round in the Manufacturers' Exhibition Building, Chicago.

No. 118N. Weight 352 lbs.

Have weight where most needed, in the body, oven and firebox.

Every sale made means a satisfied customer.

The MATCHLESS is the missing link to kitchen happiness.

Cheap in price only.

No. 118N

in full nickel trimmings

$17.10

NET 15 DAYS

Size of oven 17x12x21 inches; top cooking surface, 30x36 inches.

Write for Catalogue at Once and Get in Line.

Kindly mention The American Artisan

LANDAY STEEL RANGE CO., 2615 North 15th St., ST. LOUIS

Champion Monitor Steel Ranges

1905 PATTERN

FOR HARD OR SOFT COAL, COKE OR WOOD.

The "Monitor" is Built to Last

They are well-known, strongly made and of good material. Dealers can recommend them with confidence. **Pleased customers** are good advertisements. Customers buying a Monitor are pleased for a lifetime.

They are made in four sizes, with or without high closet, with water back or reservoir, and with cast or plain base. The difference in cost between the Monitor and a cheaper range, is saved many times over by its saving of fuel

We furnish our dealers with advertising matter and co-operate with them to make sales.

WRITE FOR COMPLETE CATALOGUE AND DISCOUNTS.

The Wm. Resor & Co.

Cincinnati, Ohio

ESTABLISHED 1819 INCORPORATED 1899

A Strange Story

We started out to make a steel range which would be superior to any other on the market. We considered quality alone. We lined it **fully** with asbestos, riveted it every two inches, braced the oven plates securely, used the best blue polished steel, and applied many desirable contrivances. We called this the

PRIZE STEEL RANGE

After this range had been on the market a little while **we sold so many that we found we could reduce the price.** Dealers in buying get **both quality and price.**

The Foster Stove Company

IRONTON, OHIO

The Merits and The Price

of this

Square Oven Cast Range

With

New, Handsome, Steel High Closet

will win more trade and longer friends than a cheap steel range at any price.

Ask for Information.

THE PORTSMOUTH STOVE & RANGE CO.

PORTSMOUTH, OHIO

MORLEY BROTHERS, Saginaw, Mich., Wholesale Agents for Michigan

THE BUSIEST MAKERS OF STOVES & RANGES IN THE WORLD

Here's a Hot Weather Snap for Wide-Awake Range Dealers

I am going to sell 1000 400 lb. six hole steel ranges finished in Japan for

$15.00 Each

just to keep my boys out of trouble during the hot weather by keeping my foundry running full blast. I'll sell the ranges too, so you'd better get in line and ORDER NOW.

These ranges formerly retailed at $60. each. Send me a carload order and get my best cash discount or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money?

DO YOU KNOW there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them? I would much rather sell to a good hustling dealer than direct to the consumer.

WILLARD STEEL RANGES

are advertised in many leading publications, and the people know them and want them. Get my prices—it means profits—DOLLARS—to you. Every sale leads to another. I can sell you a better range than you can buy ANYWHERE for the money, one that cooks well and bakes evenly and perfectly, and will last a life time, with proper care. Tell me how many ranges you can sell annually and I will make you a very interesting proposition.

AGENTS WANTED

WM. G. WILLARD, Room No. 28 Willard Bldg., 316 CHESTNUT STREET, **ST. LOUIS, MO.**

ASSORTED PACKAGES MICA

Put up expressly for the Retail Trade

ONE POUND—4 SIZES—¼ lb. each size.

North Carolina, **$3.10**
Wyoming, - **2.65**

4½ x 6	2½ x 3
2¾ x 3¼	2 x 5

TWO POUND—8 SIZES—¼ lb. each size.

North Carolina, **$6.00**
Wyoming, - **5.10**

2 x 3	2¾ x 3½
2 x 4	2½ x 3
3 x 3	2½ x 5
3 x 4½	4½ x 6½

THREE POUND—12 SIZES

¼ lb. each size.

North Carolina, **$8.50**
Wyoming, - **7.30**

4½ x 5	2¾ x 3¼
2¾ x 4½	2 x 4
3 x 3	2¾ x 2¾
2½ x 3	5 x 6
2 x 3	2½ x 5
2 x 4½	2¼ x 3¼

ABOVE PRICES NET. NO DISCOUNT.

CHICAGO **EUGENE MUNSELL & CO.** NEW YORK

The CONSTRUCTION

OF THE

CHAMPION and MARQUART STEEL RANGES

gave our goods their reputation.

Our double flue hot blast draft is guaranteed to save one-third in fuel. Will burn any kind of fuel. It's a wonder. Send for our catalogue and see for yourself. **Showing them is selling them.**

CHAMPION STEEL RANGE CO., CLEVELAND, OHIO

F. D. BURGESS,

WAUPACA, WIS., writes,

"I advertised a set of Tinner's Tools in your paper and have sold them, and I have received letters from parties wanting them, from all parts of the United States. That goes to show that The American Artisan has a great circulation."

M
TRADE MARK

Moore's Stoves Always Please

"IT SHOWS IN THE FINISH"

Looking for Quality

There is much of your reputation as a Stove Dealer that comes from the *quality* of the Base Burner which you sell. It is the Highest Grade Stove in general use, and often, to the buyer, is the most important and costly piece of furniture in his house. It should be a perfect stove, *dependable* and *satisfactory* in every way; if not, your reputation suffers.

We pledge you our reputation that Moore's Base Burners are right and dependable, and, in addition, they have that correct appearance which is so absolutely essential in attracting the eye of the buyer and clinching a sale.

Are you looking for a better line of Base Burners for your 1905 trade? If so, let us know it early. We are placing agencies *now*.

THE EASY LINE TO SELL

87 JOLIET STOVE WORKS, Joliet, Illinois.

There'll Be a Great Demand

For

The Cahoone Anti-Smoke Stoves, Ranges & Heaters

Don't be caught without them in stock

Get the booklet
"15 Reasons"—illustrated

The Cahoone Company
41 Park Row, New York

Barler Ideal Oil Heaters

have patent wick tubes that prevent even the suspicion of an oil smell. A medium size will thoroughly heat a large room in cold weather at a cost of 1c an hour, and will last a dozen years without repairs.

Their handsome appearance helps the salesman.

We want to prove to you, at our own risk, that Barler Ideal Oil Heaters will be good for your business.

Write us for proof, and if you would like to see one of the new 7-color posters, ask for it.

A. C. BARLER MFG. CO., 104-106 Lake Street, CHICAGO

F. M. BORDEN, & BRO., Philadelphia
PRESCOTT & CO., Boston
CHAS. BROWN & SON, San Francisco, Cal.
CRIBBEN & SEXTON CO., Portland, Ore.

FALL TRADE WILL BE LARGE

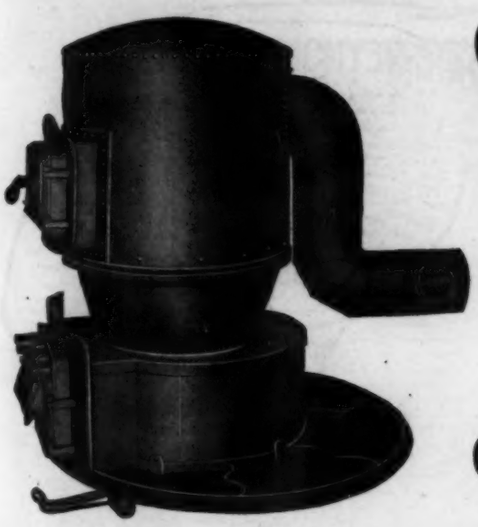
Crops look well, prices are good, and general conditions favorable, so get in line for your share of this business by securing a stock of

Born Steel Ranges

These goods sell readily because they appeal to the common sense of the housewife. She can quickly see their strong points, and when you name the price it is easy to get her order. Many new sizes and patterns.

Send for Catalogue and fall terms.

THE BORN STEEL RANGE CO., Cleveland, Ohio

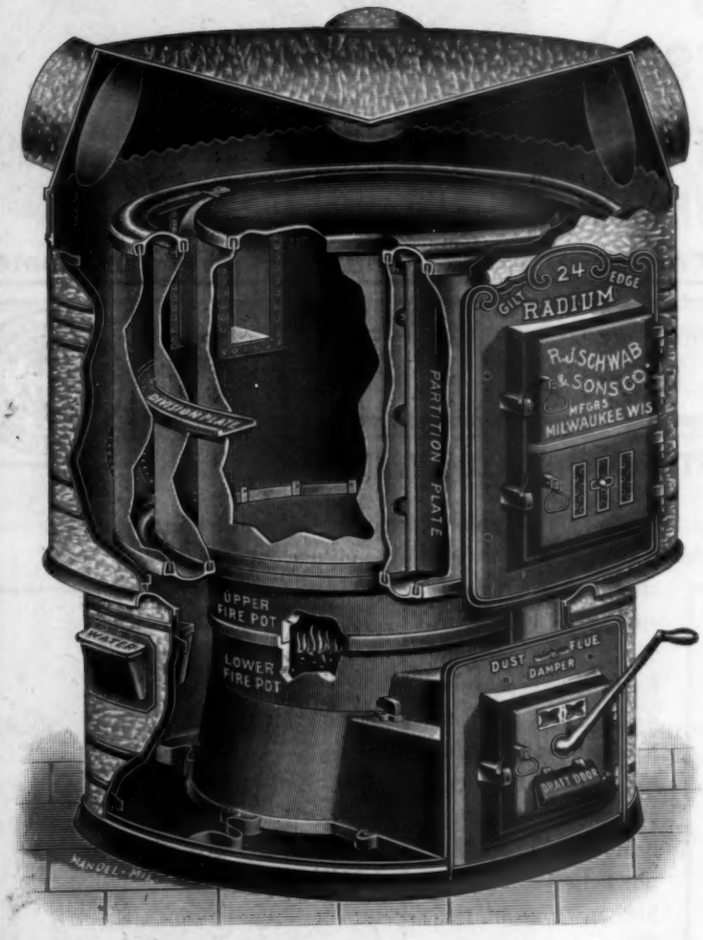


Green's New Hawkeye Furnace

is made especially for those dealers who are looking for a substantial, well built furnace that they can unreservedly guarantee to their customers, and yet one that they can install at a competitive price and still make a good clean profit. We want you to notice the short feed chute which makes such an unusually large air space at the back. Nine inch round diving flue which is not apt to clog up. Convenient and effective clean out. Extraordinarily large ash pit. Triangular revolving grates. These special features make the Hawkeye an easy furnace to sell and, when combined with the price it makes a combination that will defy competition. You can tell by the construction that it cannot help giving satisfaction it you give it half a chance. We have two sizes ready for shipment and will be glad to quote you prices.

GREEN FOUNDRY & FURNACE WORKS

DES MOINES, IOWA



We gave you last week one or two reasons for the immense superiority of the Radium Improved "Horse-Shoe" Radiator over other so-called "Horse-Shoe" radiators. Here's another: The products of combustion *are held in the dome* of the

Gilt Edge Radium Furnace

There is no short circuit directly from the fire out into the radiator as in the other so-called "Horse-Shoe" furnaces. Holding the products of combustion in the dome causes *perfect* combustion. The gases, smoke and soot are *ignited* before passing into the outer radiator.

There are lots of other reasons.

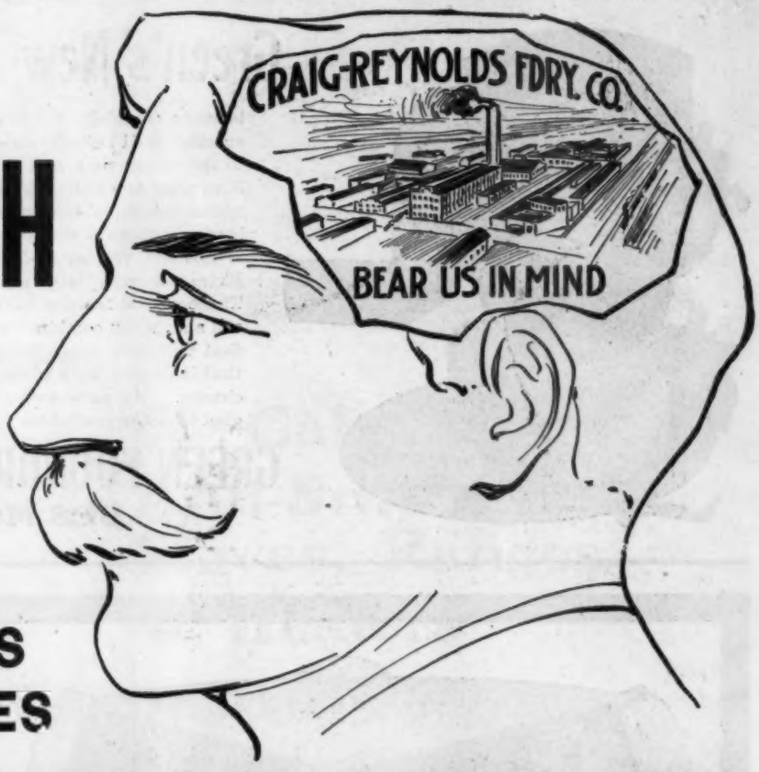
R. J. Schwab & Sons Co.

The Furnace Men

Milwaukee, - - - - Wisconsin

BEAR US IN MIND

TRIUMPH HOT AIR FURNACES



MANY STYLES
MANY SIZES

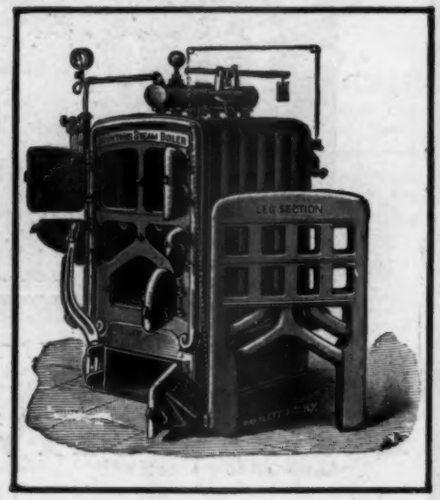
JOHN KONTNY, WESTERN AGENT, 65-67 N. Desplaines St., CHICAGO.
THE CRAIG-REYNOLDS FDRY. CO., DAYTON, OHIO.

Mfrs. Triumph Furnaces, Triumph Hot Water and Triumph Steam Heaters

BOYNTON

FURNACES, STEAM and HOT WATER HEATERS

Have stood for an honest value for 56 years. They have always worn well—they have required very few repairs—they have given out plenty of heat with a small expenditure for fuel—they have given a steady rather than a spasmodic heat—and that's why dealers have found them a desirable line to handle. Many a dealer has found that the handling of Boynton heaters has been a big help in building him up a reputation for the best work.



Shall be pleased to send you a catalogue and price list.

The BOYNTON FURNACE CO.

147-149 Lake St., CHICAGO 207-209 Water St., NEW YORK

MONARCH

AIR BLAST FURNACES

FOR SOFT COAL

If you have not received our 1905 Catalogue, please send for it at once

The Forest City Foundry & Mfg. Co.

Cleveland, Ohio

"COMING EVENTS"

Not in several years has the outlook been brighter for a very heavy Fall Rush.

Perhaps this Rush is local with the KELSEY WARM AIR GENERATOR, but that isn't the point.

We want to impress upon Heating men in unoccupied KELSEY territory that *now* is the time to ask for the KELSEY AGENCY, that *now* is the time to place a sample KELSEY GENERATOR on the Sample Floor, and that *now* is the time to anticipate your wants for the next three months —if you want KELSEY GENERATORS for your better class of Heating Work.

It's very evident the KELSEY is more popular, and that KELSEY Agents are making more sales than ever before.

Want Our Exclusive AGENCY Proposition?

"There's Only One Warm Air GENERATOR."

KELSEY HEATING CO., SYRACUSE, N. Y.

New York City: 156 FIFTH AVENUE
Philadelphia: Builders' Exchange, 24 S. 7th St.
JAMES SMART MFG. CO., Brockville, Ont., Sole Makers for Canada.
Western Sales Agents: COOK & VAN EVERA COMPANY 38 East Lake Street, CHICAGO

FRONT RANK
Steel Furnace

The FRONT RANK is a splendid proposition for the Furnace Dealer who is anxious to build up a profitable Furnace Business.

The FRONT RANK has no cast iron fire pots to crack or warp. It is a very powerful heater because it has long verticle fire travel; it is moderate in price, yet surpasses the more expensive Cast Iron Furnaces — and the FRONT RANK gives absolute protection.

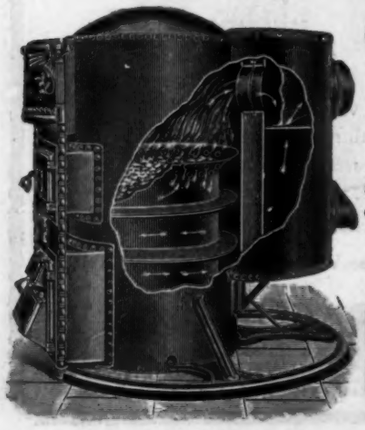
We want to send you our catalogue and quote our prices.

Haynes - Langenberg Mfg. Co.
2301-2309 Lucas Avenue, ST. LOUIS, MO.

Wise People
buy
Wise Furnaces
Manufactured by
The Wise Furnace Co.
Akron, Ohio.
Catalogue and discounts sent on application.

JAHANT
PURE
WARMED AIR
Cast and Steel Radiators
SEND FOR CATALOG

ROHRBACHER & ALLEN, Akron, O.



WEIR ALL-STEEL GAS AND SMOKE CONSUMING FURNACE

It's a good plan to know all about the best furnace on the market.

Write and we'll tell you.

MEYER FURNACE CO.
PEORIA, ILLINOIS.

"THE HANDY FURNACE PIPE"

ABSOLUTELY SAFE

The saving of labor in putting it up makes it the cheapest hot air pipe in the market.

Write for catalog.

F. MEYER & BRO. CO.
PEORIA, ILLINOIS.

Smith's Latest Improved Double Lock Nested Stove Pipe

FIG. 2

Construction of which is very simple, practical and just as safe as riveted pipe. Can be cut when fractional joint is required, without the use of a rivet. Guaranteed to fit perfectly.

Fig. 2 Cut shows pipe as it is being closed.

Write for free model, showing how it locks automatically without the use of tools of any kind.

The OHIO STOVE PIPE & MFG. CO.
NEW PHILADELPHIA, OHIO

Lion Combination Furnace

During the quarter of a century that we have been making furnaces, our products have satisfied so many customers that we let **their** commendation speak for us.

Write for Catalog.

The Youngstown Furnace Co.
YOUNGSTOWN, OHIO.

INDEPENDENT GAS HEATERS

THE Air to be heated is taken in directly over the burner—where it is hottest. This fact alone makes these heaters more satisfactory than any others on the market. There are many other reasons. Ask about them. Get our 1905 catalogue.

INDEPENDENT MFG. CO.
CLEVELAND, OHIO.

THE BEST or POOREST COAL

CAN BE USED IN THE

CANTON Perfect Blast Furnace

Notice the large tubular radiator, perfect blast device, secondary radiator inside of casing, and other good features. GET OUR BOOK.

The Bonnot Company
Canton, Ohio

THE "X.L.O." WARM AIR FURNACES

are heavy, plain and effective. No "clean outs." Grate and Radiating surface large. Been under severe test 5 years. Catalog explains all about it. Write us. Special prices for 1905.

The Wellsburg Heating & Foundry Co.,
Wellsburg, W. Va.

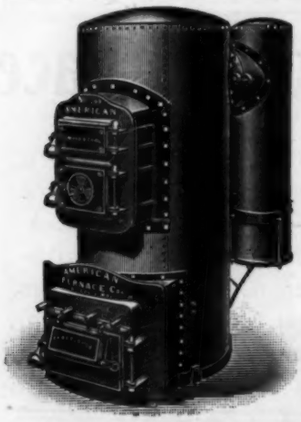
It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application.

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades.

ADDRESS

DANIEL STERN
69 Dearborn St., - CHICAGO



American Double Door Furnace

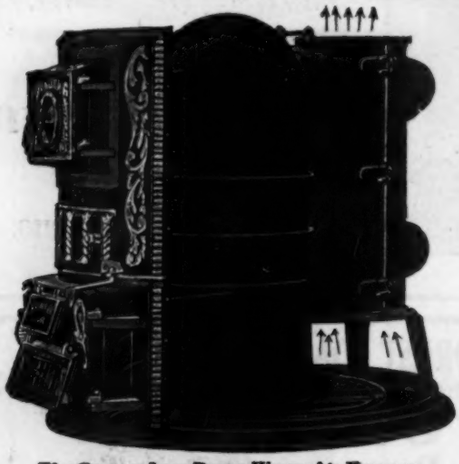
It is made on vertical lines. Heated air rises in straight lines and in its ascent keeps in direct contact with the entire surface of the furnace, when it is built on vertical lines like the

American Steel Plate Furnace

Air is not heated by the warmth passing through it. The air four miles above the earth is cold, though the sun's rays are just as hot there as here. Air is warmed only by contact, the contact you find in vertical lines. Let us tell you more.

AMERICAN FURNACE CO., 1911-1913 Pine St., St. Louis

"The American Steel Plate Furnaces Never Crack."



The Crown, Low Down Warm Air Furnace.

WHAT FURNACE?

It's a burning question with most dealers. And the more the question burns, and the more the dealer thinks and the more consumers study—the more popular becomes the

CROWN LOW DOWN FURNACE.

Our new furnace book will tell you why. If other dealers are pleased, may we not help you?

March-Brownback Stove Co.

POTTSTOWN, PA.

EMPEROR FURNACES

FOR WOOD

SIMPLE SAFE DURABLE

ECONOMICAL IN FUEL

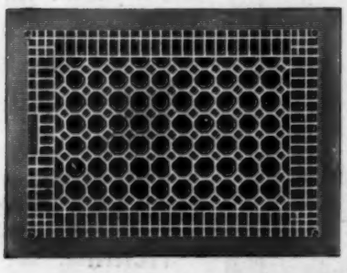
The Best and Cheapest Line of Wood Furnaces.
Furnished for either Brick or Galvanized Iron Casing.

BERGSTROM STOVE CO.

Send for Catalogue **NEENAH, WIS.**

TUTTLE & BAILEY REGISTERS

ESTABLISHED 1846.



THE OLD RELIABLE

AWARDED FIRST PRIZE IN ALL INTERNATIONAL EXHIBITS—Philadelphia 1876. Chicago, 1893. Paris, 1900. Grand Prize and Two Gold Medals, St. Louis, 1904.

We now have an Exhibit at the Lewis & Clark Exposition, in the Manufacturers Building, Portland, Oregon.

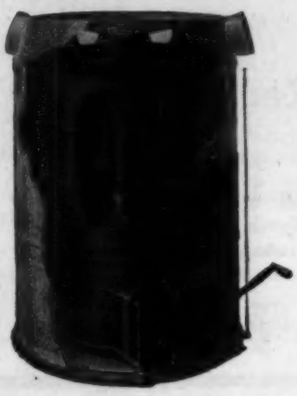
Our goods are the standard of comparison and have stood the test for over sixty years. They will please your architect, your customer and you, and when installed will last a life time. Don't try experiments with other registers.

Our stock of registers is now 600,000 pieces and we can fill your orders *immediately*.

TUTTLE & BAILEY MANUFACTURING COMPANY

NEW YORK CHICAGO BOSTON BROOKLYN

SOMETHING ENTIRELY DIFFERENT



from all other makes of furnaces, is the MUELLER double radiator, all cast furnace. Its consumption is on scientific and practical principles.

The MUELLER contains all the good features known to the heating world, and many of these good features are found exclusively in the Mueller.

Comparison with other furnaces is out of the question, as no other furnace made can compare with it in any way, shape or form, therefore dealers handling the Mueller have no competition to contend with.

Do you want to learn more about the Mueller? If so, write,

L. J. MUELLER FURNACE CO.

ESTABLISHED 1857

191 Reed Street, - - - - - - MILWAUKEE, WIS.

FURNACE MEN

THE

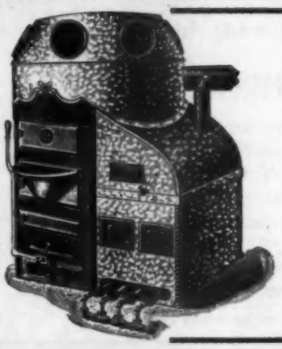
Perfection Dust Trap and Ventilator

Catches all the Dust and Ventilates the House.

Increases your business and satisfies your customers.
Can be attached to any furnace.
For particulars write

DAVIS & WALCOTT
Manufacturers, ATCHISON, KANSAS

THE AMERICAN ARTISAN Ads Bring Results.



The "Manest"

COMBINATION

Coal and Gas Furnace

Can be used in connection with old or new furnaces.

AGENTS WANTED

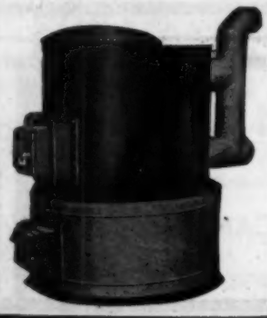
THE MANNEN & ESTERLY CO.
Cleveland, Ohio
SOLE MANUFACTURERS

MONCRIEF

WARM AIR FURNACE.

Specialties:
- All Cast Iron.
- Moncrief Duplex Grate.
- Large Radiating Surface.
- Double Fire Pot.
- Large Grate Surface.
- Top Return Flue.
- Simplicity, Durability, Economy.
- Cleanliness in Use.

HENRY & SCHEIBLE CO.
6-8-10 Long St., Cleveland, O.
Sales Agent—J. G. KIMMEL, 2214 East 15th St., Kansas City, Mo.

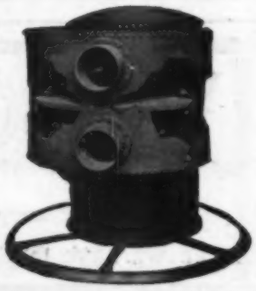


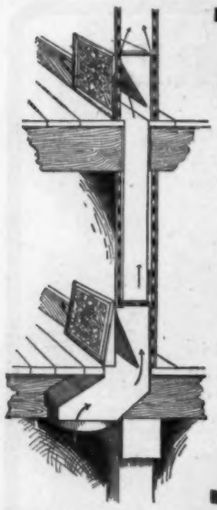
The Modern Steel Furnace

Manufactured by

WM. U. KOONS, DANVILLE, ILL.

This furnace is made of very heavy steel and well built throughout.
Write for catalogue and prices, and secure agency.





Fifty Years Ahead

The first radical change in the science of warm air heating in half a century has been caused by the introduction of the

Schwab Side Wall Registers

This is not only the most practical, the most scientific register on the market. It is also the essential factor in a modern but thoroughly tested **System** of heating houses with warm air.

Whether you expect to invest in the Schwab Side Wall Register or not, if you are a progressive dealer, you will write for a copy of "Modern Methods of Heating Residences." Remember, we supply free of charge plans for heating residences under The Modern System in cases where our products are used, the results guaranteed and our plans followed.

R. J. SCHWAB & SONS CO., The Furnace Men **Milwaukee, Wis.**

PERFECTION
Ventilating School Room Heater

for Township Schools.

Superior to any made in this country.

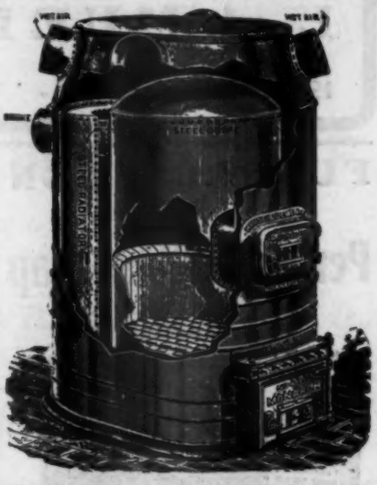
THE MONARCH FURNACE,

made of heavy annealed steel, has a very large radiating surface, has our patent revolving grate, is easy to operate; is absolutely gas and dust tight, and manufactured by

KRUSE & DEWENTER

427-429 E. Washington St., Indianapolis, Ind.

Send for Catalogue and Price List



The Horse-Shoe Radiator

Notice the dome with the outer return flue or horse-shoe radiator. It is high enough to give an extra large combustion chamber and at the same time make the furnace low enough for shallow basements. Ample space is left between the dome and the inner circle of outer radiator.

Floral City Capitol Furnace

It is heavily constructed. No flimsy or light material is used. The body and radiator are made of No. 10, No. 8 and No. 6; not No. 16 and No. 20, as most furnaces. Where the products of combustion pass from the body into the outer radiator, a solid cast iron plate instead of steel is used.

Get our latest catalog—new.

Monroe Fdry. & Furnace Co., MONROE, MICH.

WILSON & LESLIE, SOUTH BEND, IND.,

WRITE:

"We are surprised at the great circulation of THE AMERICAN ARTISAN as we have received letters from a great many different states."

MUELLER
WALL REGISTERS

Simple
Durable
Quickest Installed
Greatest Capacity

We also make a complete line of Floor Registers. GET OUR PRICES.

L. J. MUELLER FURNACE CO.
191 REED STREET Established 1857 MILWAUKEE, WIS.

Monitor Furnaces and Combination Heaters.

You can secure a copy of our complete 1905 catalogue by sending us your request for one. The finest half-tones illustrating the various constructions of complete furnaces and sectional views of important features with descriptive matter setting forth the many advantages. If you are interested in the subject of heating, we will be pleased to mail you one promptly and quote you prices and terms.

Our traveling representatives are experienced and practical men, who, when desired, make plans and estimates free.

We solicit the trade. Write for our catalogue.

KEITH FURNACE COMPANY, DES MOINES, IOWA.

Manufacturers of

MONITOR FURNACES and COMBINATION HEATERS, REGISTERS, FURNACE PIPE and FITTINGS.

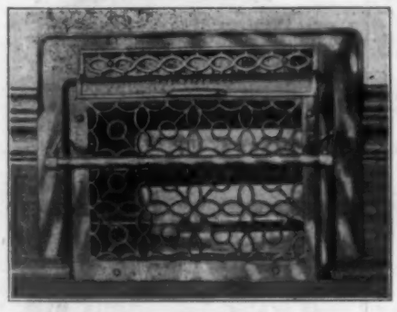
HEAT LIGHT FOR THE HOME STORE HOTEL SCHOOL CHURCH OFFICE COLLEGE THEATRE FACTORY VILLAGE

INFORMATION FREE SEND FOR IT.

DETROIT HEATING AND LIGHTING CO. DETROIT MICH.

"It is true that advertising will not put merit into poor merchandise, but good merchandise often becomes poor for the want of good advertising."

—Some Essential Oils for Advertising.



Front View Waterloo

WATERLOO REGISTER COMPANY,
Waterloo, Iowa.

DISTRIBUTORS.
Prest Heating Co., Kansas City, Mo.
Hibbard, Spencer, Bartlett & Co., Chicago, Ill.
Stratton & Terstegge, Louisville, Ky.
Peck-Williamson Heating Co., Cincinnati, Ohio
Pease-Waldon Co., Winnipeg, Manitoba, Agents for Canada.

A Useful Ornament

There are several features in the WATERLOO, aside from the water pan, that makes it strongly desirable. The unique method of opening and closing the valves with the foot rest: When foot Rest is extended, valves are open; when Rest is pushed back out of the way, valves are closed.

The WATERLOO Side Wall Register is attractive in design and neatly finished,—

And the Evaporating Moisture-Supplying Water Pan adds very little to the cost.

Our little booklet tells the story of the WATERLOO in a clever, interesting way.

It shows the WATERLOO inside and out,—and we'll send the booklet *and our quotations to any Furnaceman on request.*

Stowell Side Wall Registers

We have several **ENTIRELY NEW FEATURES** in our **Side Wall Registers** this year. Write us and get a new special catalogue and let us tell you why we **know** we have the **most practical** and **satisfactory** Side Wall on the market. Also full line of Floor Registers.

Stowell Mfg. & Foundry Co.
51-73 Milwaukee Ave., South Milwaukee, Wis.

FERROSTEEL REGISTERS

WE MAKE ALL LINES

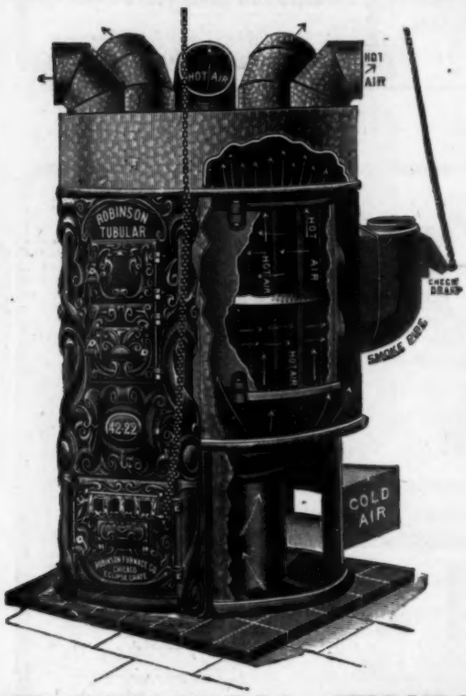
All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR
- **ALL CAST** Are time tried and worth proven.
- **MODIFIED STEEL** The novelty success of 1904.
- **ALL STEEL** Orders accepted for September delivery.

THE FERROSTEEL CO.. 34 Michigan St., CLEVELAND, OHIO

ROBINSON TUBULAR



Small Flues
Many Flues
Long Flues
Seamless Flues
Revertible Flues
Indestructible Flues

Full Return Flue Radiator

A TAPE MEASURE TELLS WHY IT SELLS

ROBINSON FURNACE CO.

170 Lake Street, CHICAGO

THE AMERICAN ARTISAN Want Ads fill your wants.

Smith's Hot Water Specialties can be used in hundreds of jobs where the Furnace is either working poorly,—or is overloaded. We make Hot Water Attachments to fit any Warm Air Furnace or Heater,—and the capacities range all the way from a 30 gallon tank up to carrying 1,000 ft. of radiation.

Our interesting little booklet and prices for the asking.

Chas. Smith Co.
103 Lake St., CHICAGO, ILL.
Omaha Stove Repair Works, Western Agents

TRADE MARK
ACME
REGISTERED

Nested and crated for shipping.
Twenty-five Joints in Crate.

BEWARE OF IMITATIONS!

"ACME" STOVE PIPE

Patented

The Only Practical Loose Pipe Made Easily and Rapidly Put Together

This pipe is made of No. 27 cold rolled smooth steel, of nice dark uniform color and finish, and coated to prevent rust. Also made of polished steel and planished iron. Made in all sizes—3, 4, 4½, 5, 5½, 6 and 7 inch—also in half joints and taper joints.

Be sure to get the genuine goods with the "Acme" Trade Mark.

"Acme" Dripping Pans.

Nested Three Dozen in a Crate.

The best finished and neatest dripping pan in the market. Made in all leading sizes.

"Acme" Bread Pans

Made of fine finished black iron; also in tin in a varitey of sizes.

Four-Pieced
Four-Pieced, Adjustable
One-Piece, Corrugated
Four-Pieced, Extra Heavy
Four-Pieced, Extra Long
Four-Pieced, Extra Heavy, Extra Long

All sizes—all grades. Made of smooth cold rolled steel, planished iron and polished steel.

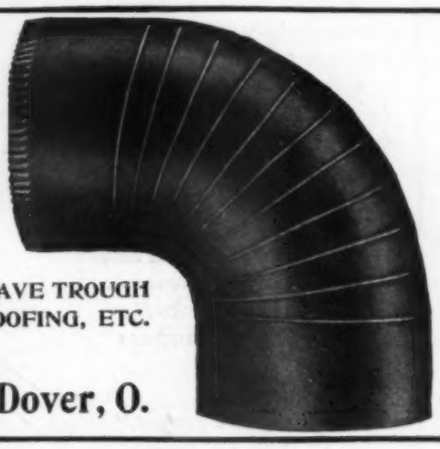
FOR SALE BY ALL LEADING HARDWARE JOBBERS AND DEALERS.
Manufactured by

BUDKE MANUFACTURING CO.

PITTSBURG, PA. **PARKERSBURG, W. VA.**

A Few Points About

THE DOVER ELBOW



No unsightly seams or corrugations to give it a bunched appearance.
No corrugations to reduce diameter and collect soot.
It is made on a scientific principle and is the same diameter as the pipe.
The ONLY ELBOW with a smooth surface, permitting of a high polish.
Shipped in BOX CRATES, insuring perfect goods at destination.

Also Manufacturers of the

DOVER PATENT NESTED STOVE PIPE, GALVANIZED EAVE TROUGH and CONDUCTOR PIPE, CORRUGATED IRON, STEEL ROOFING, ETC.

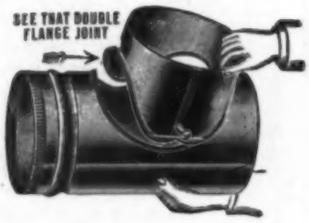
WRITE FOR CATALOG AND PRICES

The Reeves Manufacturing Co., Canal Dover, O.

HANDY NESTED STOVE PIPE T JOINT

Saves 90 per cent of room.
Saves 75 per cent of freight
Does not damage in shipping.
Is stronger and neater than a hand made riveted T.
Is always ready for use.
Fastens together with two bolts.
Is a perfect fitting joint.

Never the rusty and unsightly T Joint usually offered for sale. Always neat, clean and salable. Packed ten 12-inch joints in a crate 7x8 inches and 14 inches long. Weighing 15 pounds. Made in Common, Polished Blue Steel and Planished Iron.



ASK YOUR JOBBER FOR THEM.

KINNE MANUFACTURING CO., - - - Minneapolis, Minn.

It is one thing
to make alluring claims
for a furnace
and another thing
to deliver the goods.
We do not attempt to tell
how much fuel the
Round Oak Furnace will burn
nor how great a percentage
it will save—the fact is
we do not know.
We could guess and
we could "fabrications"
but that would not do,
for then we would get
into the class that
needs watching.
We are content to state
that in material and fine
workmanship—that is, fitting
the doors, drafts, joints, etc.
—it is absolutely unequalled
by any furnace construction
on the market,
that it is a powerful heater,
has great durability and is
economical in the use of fuel.
If you deal in furnaces and
have a trade that demands
THE BEST, we make it,
and a look at the furnace
will prove it.
Furnace book,
"Warmth and Comfort,"
sent by mail on request.

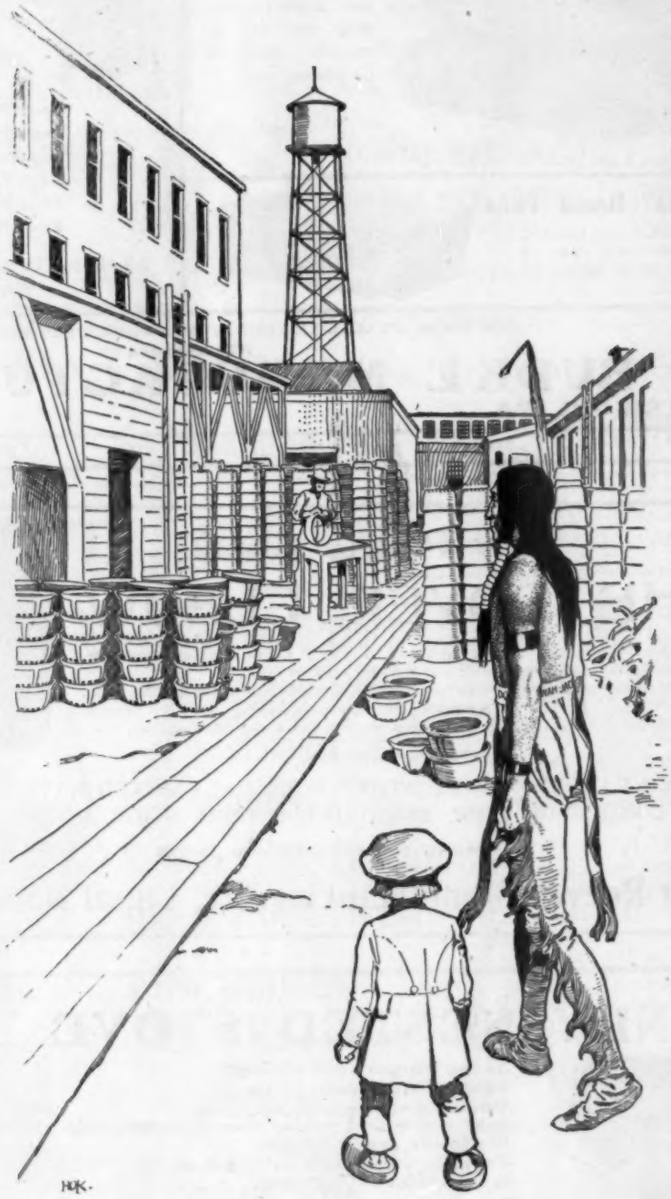
ESTATE OF

P. D.
BECKWITH

Fred E. Lee, Manager

DOWAGIAC
MICH.

MAKERS OF GOOD
GOODS ONLY



"Here, Fritz, are a few of the famous Round Oak Coal Fixtures that prevent the formation of clinkers when soft coal is used."

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00. IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.

Address all Letters, communications, and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,

69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.

THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, AUGUST 26, 1905.

AT THE recent meeting of the New York State Association of retail groceries held at Syracuse, N. Y., resolutions were passed directing a protest to Congress against the enactment of the proposed parcels post law.

WORLD-WIDE pig iron statistics for the year 1904 show that the production in the United States during the year 1904 was less by 1,500,000 gross tons than the production during 1903. The production in Germany was about 18,000 gross tons greater during 1904 than during 1903. France showed an increase during 1904, and likewise Belgium and Canada. Great Britain and Russia showed a decrease. The total production so far known shows a decrease of slightly over 1,000,000 gross tons during 1904.

IT IS the intention of United States District Attorney Sherman T. McPherson to establish, if possible, a precedent in the case of a man arrested for destroying a rural mail box. The question involved is, "Has the general government jurisdiction over a letter-box on a rural free delivery route?" The matter under discussion is one wherein a rural mail box was destroyed at a time when there was no mail in it. If there had been mail the case would have been clear. But when a box contains no mail matter, the case presents another and dubious phase.

Economy.

OLD BEN FRANKLIN'S proverb, "a penny saved is a penny earned," has perhaps done as much evil as good. Reckless extravagance is not to be encouraged, and there is no question but what a little sum laid by for a rainy day or for old age, is a most wise precaution. Nevertheless, for some reason or another, Franklin forgot to advise where the savings should be placed. Consequently, many of the more frugal of our population resort to an old stocking or to a pocket in a hair mattress. The evil of this system lies in the fact that the savings thus placed are not doing their share of the work. They are like the one talent mentioned in the Old Book which did not earn another talent, and which consequently was taken away by the original donor.

Hardware dealers have an exceptional opportunity for utilizing all of their savings. There are few dealers who hoard their profits in any less paying institution than a savings bank. There are many dealers, however, who fail to turn over their stock more than once a year or perhaps once every two years. Out of date saws, nail pullers, stoves, things of that nature are stored in some unapproachable corner and are left to rust away from sheer neglect and encumber the shop until the owner's death. The opportunities to turn these old wares into cash are not perhaps innumerable. There are few people who would care for a seemingly second-hand saw, and if there were, these saws are probably so well covered up by cobwebs and have so long remained concealed that the clerks would not be able to find them. A special sale disposing of all the old rubbish, even if not more than fifty per cent of the original jobber's price could be obtained, would be an example of true economy.

True economy is a misnomer as commonly employed. It does not mean parsimony or stinginess. Economy means the wise regulation of expenditures. An economical person may spend more money with the same income than an extravagant person. Economy means the elimination of useless expenditures and the concentration of all one's resources upon expenditures which will increase his share of happiness or of wealth and increase it more than the original investment was worth to him. Parsimony very often leads to a neglect of appearances. The parsimonious individual is inclined to indulge in only the actual necessities of life and in doing so remains blind to the fact that the purchase of a good new suit of clothes or of a new display counter might reimburse him ten or a hundred times its original cost. A new suit of clothes might seem highly extravagant, but would eventually prove a most profitable investment. It would be truly economical.

In the same way there are other dealers who feel that the two or five dollars to be paid to the state hardware association for membership in that body would imply the greatest of extravagance. The answer is often made that they cannot afford to belong. These dealers show a narrowmindedness and parsimonious disposition entirely different from what we should expect from the economical person, who if his income were not of tremendous proportions, would pay his dues, make the trip to the annual convention in the cheapest manner, meet his competitors, get the product of their brains upon the most troublesome questions, and increase his own store of information. The dealer who refuses to go because of limited finances may be compared to the parsimonious individual who deposits his savings in his stocking. He is not placing his money where it will do the most work. "A penny saved is a penny earned" should not be interpreted so as to imply that the penny should be saved or stored up in an unremunerative receptacle. It

should be placed where it can double or perhaps triple its original value, when coupled with the dealer's own efforts.

Leisure and Clerks.

It is interesting to note in reading over the history of the different tribes and races as they have lived and evolved in their respective habitations, that as they increased in numbers there was a corresponding increase in the fertility of the soil or in other means of sustaining livelihood. When Columbus came to this country the fifteen million more or less square miles now enclosed by the boundaries of the United States were supporting not over five million and perhaps only one million human beings. Students tell us that the country was incapable of supporting more people of the type that inhabited the country at that time. The American Indians lived by hunting. Large game preserves were necessary. The sustenance obtained by tilling the soil was a mere bagatelle. Each tribe had the boundaries of its territory clearly marked out, and when a neighboring tribe encroached upon these preserves the red paint and the tomahawk announced hostilities. When the number of members in a certain tribe had multiplied and the forest belonging to that tribe failed to support the population satisfactorily, a raid was made upon the forests of neighbors, war was declared, one tribe or the other was exterminated and the population reduced to its proper number. At the present time this same extent of surface is able to support seventy-five millions of people certainly, and students tell us that it could easily support three hundred millions. This is caused by the invention and discovery of new methods and artifices and new uses and necessities. The three square miles which were required formerly for the comfortable existence of one savage, now supports a thousand or fifty thousand human beings, more comfortably, better fed than their red predecessors.

It is safe to say, however, that the occupant of this country to-day has a busier time than the thoughtless savage of the fifteenth century. The competition of life has increased tremendously. The hours which a man must necessarily devote toward the fulfillment of his most ordinary needs have been raised from two to perhaps eight or ten out of every twenty-four. The competition is waxing warmer with the birth of every generation. The successful man not only devotes perhaps eight hours out of every working day to actual drudgery, but he usually spends a great deal of his leisure moments in thinking, planning, perhaps worrying over the program for the future and the events of the past. As the demands upon a person's store of energy and strength are increased along with the increase in population, it is probable that the amount of leisure to be given to the struggle for existence must be increased likewise. It would seem that the strenuous life had almost reached its limit at the present time. Americanitis may be defined as a disease possessed by Americans in a peculiar degree, resulting from the concentration of every possible resource, effort and nervous energy toward the accomplishment of their ambition. Continual disregard for the commonest rules of nature are sure to reap an impoverished crop.

In order to obviate working until 8 or 9 o'clock every night and on Sundays, a hardware dealer in the country recently hired a clerk. The competition was so fierce, the demand upon his time so great, that his own unaided efforts were insufficient. This is an illustration of the process which has been going on in the world. Men found that it was absolutely necessary to obtain assistance from outsiders, and the assistance was hired by the stronger. At first the whip was used by the master to enforce obedience, then a co-operative plan was employed and at the present time various other methods are used. Good service calls forth a raise of salary, words of praise a bettered position or other rewards. However, in spite of the fact that the successful employer to-day is the successful organizer, the successful student of character, no systematic effort is made by employers to raise the standard of efficiency of their employes. Occasionally desultory and spasmodic attempts are made by some concern, and lectures and talks are indulged in after business hours. One of the large retail hardware concerns of Chicago, for example, takes its clerks out for supper one night every week, pays for their meal and afterwards they are gathered together in the establishment to relate their experience with customers, and to listen to an opportune discourse on one of the seasonable specialties. For instance, during the month of May papers on lawn mowers, barb wire, ice cream freezers and other strictly summer wares will be read. During September and October the subjects might bear upon stoves or hot air furnace heating. The Crane Co., of Chicago, have a so-called model establishment, libraries being furnished to the men, lectures on topics of interest being encouraged, and inventions and original ideas receiving prompt and thankful consideration. These cases, however, are the marked exceptions. A clerk is hired according to his past record and his present appearance. He is allowed to develop according as he responds to the dictates of his own conscience and his own sense of ambition. No systematic endeavor to increase his efficiency is made.

Frank B. Gregg, of Little Rock, Ark., read an interesting paper on this subject at the recent meeting of the Arkansas Retail Hardware Association. Mr. Gregg emphasized the importance of the selling department and "the man behind." He also called attention to the desirability of studying the clerks, teaching them to know the goods they are about to sell and their points of merit.

If the clerk is to aid his employer in sustaining that existence which formerly devolved upon the employer's personal efforts, it is but natural to expect that the employer will endeavor to increase the amount of aid which his clerk can give him. It is but natural to expect that he will study his clerk, that he will attempt to instruct him in not only the rudimentary but the more advanced tactics usually employed by good salesmen in the disposal of merchandise. One evening a week, set aside for an affair of this kind, would be profitable for any of the larger merchants, or, where the merchant has only two or three clerks, a regular course of instruction might be changed into informal talks.

Every man tries to make his every dollar work as hard as it possibly can for him. He should likewise

endeavor to get the greatest possible amount of work out of his clerks. The matter should be reduced to the most scientific terms possible, and should require a great part of the employer's attention. As we have said before in these columns, the ability of a person to make money for himself is only exceeded by a person's ability to get others to make money for him.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

It all happened about four thousand years ago, but it has been told over and over and still it is a new story. A young man, countrified and simple, had spent his life on a farm. He had heard of the great cities, and the fame and fortune to be acquired there. One day he decided to wend his way to the largest city in the kingdom. He started off on his journey without considering the direction in which the star of his hope lay, merely plodding along, hopeful and confident that providence would direct his steps aright. He was strong and youthful and hopeful. The first day he covered twenty-eight miles, the second thirty-two and the third thirty-five. He failed to strike the city of his choice, but believing that this failure was due solely to his lack of energy, he continued on bravely. All of his time was spent in plodding onward, enjoying the sights, saving his money. At night when he lay down to rest, he was too tired to review his past, or to lay plans for the future. In the morning his head was filled with the business of the day. So he plodded on and on, day after day, and year after year. He never struck the goal of his ambition, because he never realized that there are thousands of different paths, and that only one led to his ideal.

And so it is with most of the mortals who have lived since the time of this young man and who are living to-day. The critical period arrives in a young man's life when it is decided that he is no longer to be provided for by others, but that his very existence depends upon his own efforts. His one salvation is work. Instead of considering carefully and studiously the different ways, and the most suitable methods, he hurriedly accepts the first opportunity. The born mechanic gets a position on a small truck farm. The youth of literary predilections finds a place in the cab of a railroad locomotive. A boy whose characteristics are all inclined toward a seat in the Supreme Court of the United States answers and accepts a position behind the soda fountain bar. It is a case of hit or miss nine hundred and ninety-nine cases out of a thousand. It is safe to say that nine men out of every ten would be more successful at some other trade than they are in their own.

The question of the adoption of a certain means of livelihood is perplexing. A correct solution of the problem can only be derived by a series of experiments, conducted before and after the determination to accept the first position has been made. The experiments made after a position has been accepted are the more fruitful. These experiments need not and should not be numerous, for, the old saying, "a rolling stone gathers no moss," is true. Nevertheless, personal examinations, introspection at frequent intervals, are a most necessary concomitant to business success.

We should ask ourselves why we are here, where we are going, and whether that is our actual desire. We should learn to look ahead. We should reconnoiter. We should do in the abstract what a traveler journeying over an unknown ground to some destination would do in the concrete. We should lay out a plan for each day, for each month and for each year. We should accomplish a certain distance or a certain amount of work each day and we should see that that distance or that work is accomplished. Once a week a thorough personal examination should be made, this examination lasting perhaps not more than five minutes. But these five minutes should tell us whether the wheel of time is carrying us and our enterprises according as we would have them carried—whether we are being swept along in the right direction or whether we are going off on a tangent. Lots and lots of people float along in the center of the stream, absolutely oblivious of all sense of direction, absolutely unconscious of the why and the wherefore, not controlling their own actions, trusting blindly to fate.

"The world owes me a living, I work and I work hard. If a man can't be successful who spends his days and his nights in the shop as I do, ambition be d——!"

Just a moment's thought every week, just a little resume, just a little clear-headed planning, and the matter would be set straight. It is not difficult. It is not a subject for the philosopher's brain. It is merely a matter of habit, a matter of happiness.

* * *

The following dispatch comes from Arkansas City, Kan. It may prove of interest to tinners and hardware men of a surgical turn of mind.

DOWN WITH SOCIALISM.

Rough Measures Used at Great Bend to Suppress It.

"Arkansas City, July 20.—William Rhea, who used to be the foreman of the tin shop for the Hamilton Hardware company, is in the city from Great Bend. He has one bone in his left forearm broken and both bones in his right forearm broken. Shortly after the first of July he left Wichita where he had been working at his trade to go to Great Bend to look after another position. He had been for years a prominent worker in the socialist party. The Great Bend socialists heard of his being in the city and they at once slated him for a speech. He had mounted the platform and had started his speech when a stranger appeared on the platform and Rhea said to the stranger: "Well what do you want, my friend?" The man told him to go ahead with his speech and he resumed.

"He had not gone far when he was seized by the back of the neck and by the trousers and pitched head first from the speakers' stand, a distance of about seven feet, to the ground.

"When picked up he had both arms broken. The stranger was arrested, tried and acquitted. Rhea says he was never summoned to testify against the stranger. He believes it was a put up job on the part of those who are unfriendly to the socialists. He says the man who threw him from the platform received 75 cents for the job."

News Siftings

MEETINGS.

National Hardware Association—Washington, D. C., November 8, 9, 10.

American Hardware Manufacturers' Association—Washington, D. C., Nov. 8, 9, 10. Headquarters, The New Willard.

The H. Wetter Mfg. Co., of South Pittsburgh, Tenn., have been making extensive additions to their stove plant.

F. S. Preston, S. D. Preston, C. L. Hamilton, J. H. Preston and Jennie M. Preston are the incorporators of the Belle Center Stove Co., of Belle Center, Ohio, capitalized at $10,000.

The Manufacturers' Stove Repair Co., 517-539 Diversey boulevard, Chicago, guarantee prompt shipments on all kinds of stove repairs. A trial order is said to prove their efficiency.

It is announced that the Mt. Penn Stove Works, North Second St., Philadelphia, are about to enter the stove repair field on an extensive scale. They expect to handle repairs for all lines and styles of stoves, heaters and ranges manufactured in the Eastern districts of Pennsylvania.

The West Coast Stamping Co., of Tacoma, Wash., is a new concern, organized for the purpose of manufacturing pressed tinware, ranges, stove pipe, etc. E. D. Murphy, R. H. McMahon, H. E. Scharf and A. E. Meyer are the organizers. It is said that $50,000 will be expended on a plant.

Clem V. Wagner, C. B. Holding, Wm. H. Tucker, A. H. Smith, James L. Stark, Rollo G. Manning and Robert H. Finch are the incorporators of the Holding Heater Co., Toledo, Ohio, capitalized at $50,000, for the manufacture of a gas heating stove invented by Mr. Holding. It is planned to have their new plant in operation late this fall and eventually to erect another factory for the manufacture of hot air furnaces.

The Gold Coin Ventiduct base burner is manufactured by the Chicago Stove Works, Blue Island avenue and Twenty-second street, Chicago. For appearance, fuel saving attributes, durability, ventilation and the other characteristics considered desirable in a heating stove, the Chicago Stove Works announce that the Ventiduct is unequaled. It is said to answer every requirement for a stove which will please the most particular and exacting customers. The Gold Coin line is a large one, including as it does, steel ranges, cast ranges, steel cooks and cast cooks, base burners, oaks and the other accessories of a large stove line.

The virgin photograph of Julia Joy, one of the most beautiful of the belles of Kentucky, appears on the cover of a circular gotten out by the Galusha Stove Co., of Rochester, N. Y. We gather from the pages of this circular that Julia, though extremely beautiful, was extremely loath to exhibit her beauty to the cold world. She declined many proffers for a sitting. One day, while on one of her many jaunts about town, she met a most charming gentleman. She smiled upon him as he passed. The gentleman was captivated on the spot and they soon became boon companions. He was most persistent in his efforts to get a picture of Julia, but she refused until he finally consented to give her a Norman steel range. This touching little romance and the photograph itself are included in the circular, which will be sent to dealers upon request.

A price list and catalogue of the American Stove & Range Co., of Keokuk, Iowa, has just reached our office. The American Stove & Range Co. was established in 1855 and reorganized in 1899. In compiling the catalogue they have aimed to make no large display with illustrations of goods that no one wants to or will buy, but to show styles which are in every-day demand. They claim that their experience in the manufacture of stoves, ranges and heaters has given them a favorable reputation, which makes it impossible for them to sacrifice material or workmanship without sacrificing their high standard of excellence.

About forty years ago, the inconvenience and expense entailed in the ordering of some simple repair for a stove made desirable the formation of firms devoted to the stove repair business entirely. The idea of carrying in one stock patterns of the parts that usually give out about stoves to fill orders from users whose stoves had proved ineffective because of this one defective part proved an original and profitable undertaking. Working along these lines, the Northwestern Stove Repair Co., 225-235 W. 12th St., Chicago, have accumulated an almost complete set of patterns for every stove, range and furnace sold in the country. These repairs have prolonged the life of many good old stoves which are not being manufactured at present. The growth of this concern from a small foundry employing only a few men to a plant now paying salaries to over two hundred and fifty men, and carrying in stock some six thousand tons of repairs, shows how popular has been the venture.

It is a sad but striking truth that in the making of a character or the building of a reputation, one little slip, one little untruth, will do more harm than years of struggle will accomplish for good. No matter how honest our words or how meritorious our claims, if we once give way to a bit of exaggeration, if our hearers even suspect that all that is claimed is not in accordance with the facts, they are apt to suspect the claims which would otherwise pass accredited. The Joliet Stove Works, of Joliet, Ill., announce that they have been extremely careful at all times not to fall into this error, but to keep within the limits in talking about the wonderful selling qualities of Moore's air tight heater. They announce that they are able at any time to make good any of their statements. Their claims not only can be fully justified by facts and by experiment, but they are said to fall far below what might be said by eulogizers of the stove.

DOVER NESTED STOVE PIPE.

The Dover Patent nested stove pipe, manufactured by the Reeves Mfg. Co., Canal Dover, Ohio, is offered as the best that money can buy and not in competition with inferior brands. Its marked simplicity, the quality of the material entering into its construction, and the careful workmanship used in its manufacture are said to make it very desirable for those who are

after stove pipe easily installed and permanent until a change is desirable.

Figure 1 shows the mode of construction of the slip joint lock; figure 2, the manner of fastening the pipe together, and figure 3, the way the pipe is nested. It will be seen that no tool is necessary in making it ready for use and that it can be shipped to customers in the original package.

This stove pipe is made with smooth or common steel, Wood's cleaned refined iron, blue uniform color

Figure 1,

Figure 2,

Figure 3.

steel, Wellsville polished steel, or Wood's patent planished iron.

The Reeves Mfg. Co. manufacture an extensive line of eaves trough, corrugated and plain round conductor pipe, ridge capping, hangers, cutoffs, elbows, shoes, mitres, end pieces, corrugated iron, V crimp roofing, roll and cap roofing, pressed standing seam, pressed brick siding, weather board siding, prepared roofing, black and galvanized sheets and tin and terne plates. They also make stove pipe thimbles, collars and stove pipe elbows. They will be pleased to send a catalogue describing these products to dealers who will mention THE AMERICAN ARTISAN.

CLEANLINESS NEXT TO GODLINESS.

If cleanliness is next to godliness, it is reasonable to suppose that the Cole Mfg. Co., of Chicago, Ill., have attained to a high position in the estimation of those people who believe that inventive genius turned toward an increase in one's opportunities for keeping clean will grant the inventor a favorable location in the world to come. Whether the design of the Cole Mfg. Co. in inventing the dustless ash cover, shown in the accompanying illustration was altruistic or selfish, it is only just to concede the fact that the results to be accomplished by its use make it a most desirable invention.

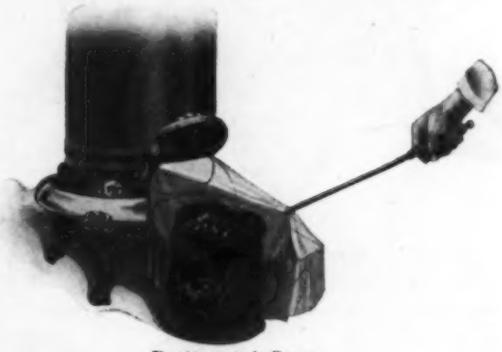
It requires neither a keen eye nor an all-inclusive memory to appreciate the fact that when a housewife or her grumbling help-meet attempts to clean the ashes from a heating stove, a goodly portion of the pulverized products of combustion descend with a never-ebbing flow onto the carpet. Hence they can be removed only by the brisk movement of a broom, with the assistance of a dust pan.

To obviate this nuisance, the Cole Mfg. Co. have invented the dustless ash cover shown in the accompanying illustration. This ash cover overcomes the necessity of spreading a newspaper on the floor to catch the ashes and flourishing a feather duster about the stove after it has been depleted of its collections.

Even when this dustless ash cover is not used, it is said that Cole's Original hot blast heaters are constructed in such a manner as to circumvent the ashes that would naturally seek the floor from other stoves. The elbow draft with its upward slant is said to make it possible to put a coal hod under the draft so that no ashes are spilled on the floor when they are removed with an ordinary fire shovel. It is generally conceded that it is cleaner to carry ashes out in a deep receptacle, such as a coal hod, than in a shallow, unbalanced ash pan. Then, too, the average ash pan is not inexhaustible and is rarely large enough to hold the accumulations of more than twenty-four hours. The use of a coal scuttle instead of an ash pan is thus an advantage in this respect, also.

The Cole Mfg. Co. claim that with this new draft they are assured an absolutely air-tight base construction, while the base heating qualities of the stove are not retarded. They claim that the cast iron bottom, the ash pan and flange used in some stoves to guide the ashes into the pan retard the base heat.

Thus it is said that the dustless cover keeps down all the dust which would naturally fall to the floor during the process of removing the ashes, while their method for disposing of this accumulation improves



Dustless Ash Cover.

the draft of the stove and facilitates the removal of the ashes.

The Cole Mfg. Co. have met with great success in pushing their hot blast as a hard coal burner. The stove is used as a combined combustion chamber and magazine. It is operated on the slow combustion principle. This firm have just completed a new power plant for their works in Chicago. It is of the producer gas type, and while the first of its kind to be installed in Chicago, it is proving a great success. This plant is creating a great deal of attention among mechanical engineers, and is said to be about to revolutionize power-producing methods in this country.

Catalogues describing the well-known line of Cole's hot blast coal heaters, Cole-ized steel hot blast ranges and air-tight wood heaters will be sent to members of the trade upon application. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

POLARIS COMBINATION HEATER.

The accompanying illustration shows the Polaris combination heating stove for heating water in large quantities. It can be used as a double heater for heating rooms over head by hot air. It can also be used in combination with hot water. It is fitted with a direct draft, a square base, plain or nickel foot rails, eclipse or draw center grate, and is made for hard or

soft coal. The manufacturers are the March-Brownback Stove Co., Pottstown, Pa.

Polaris Combination Heater.

It is said to be especially desirable in all places where hard usage and a vast amount of heat are required. Accordingly its sales for use in public buildings, school houses, churches and stores, etc., have been especially heavy. When supplied with a water heating attachment it is admirably adapted for use in laundries, barber shops and stables. Additional information will be furnished upon application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

NEW FEATURE FOR THE ROUND OAK HEATER.

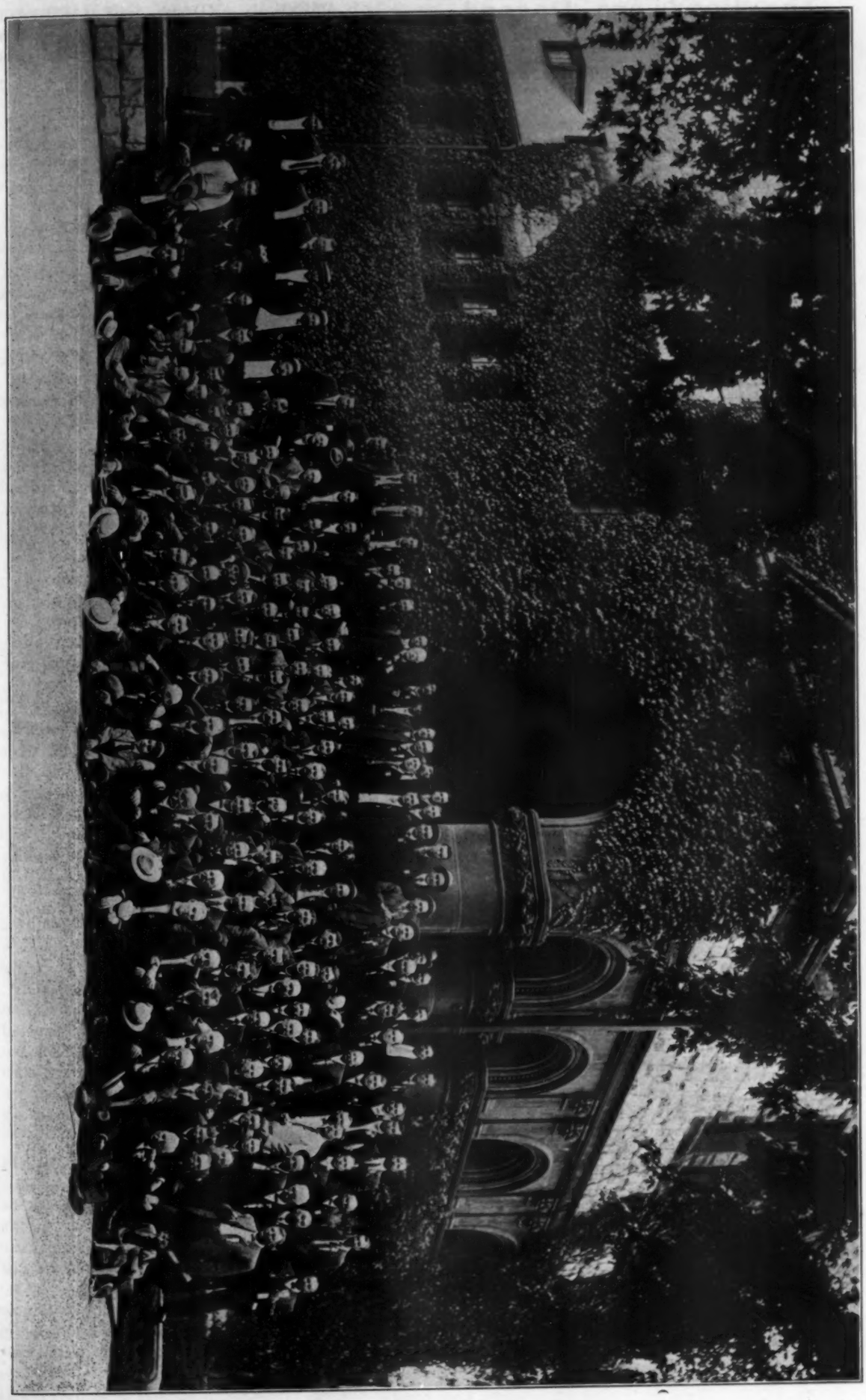
The wonderful popularity of the Round Oak heater has not allowed the manufacturers, the Estate of P. D. Beckwith, Dowagiac, Mich., to rest upon the laurels won after so much difficulty, and in so great abundance. One of the characteristics of this firm, perhaps the predominant one, is the fact that they have never allowed themselves to be satisfied with results accomplished; a continual series of improvements being striven after and realized.

The accompanying illustration shows one of the latest fixtures of the Round Oak heater. By means of their new fire-pot, it is said that soft coal can be burned with economy, cleanliness and comfort. The air is taken in at the feed door openings, carried in around the top of the fire-pot and discharged on top of the fire through a series of apertures, as indicated in the accompanying illustration. This arrangement is planned to secure the burning of soot and gas in a steady, even fire. The coal is burned from the top downward.

The Round Oak has a magazine for burning fine soft coal or slack, so that after it is filled it can feed down without the necessity of shaking the grate or poking the fire. The magazine is heavy and of a large diameter at the bottom. This prevents, it is said, clogging or hanging up of coal when coked.

Further information regarding this fire-pot, as described in the new catalogue recently published by the Estate of P. D. Beckwith, will be furnished to dealers upon request. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

New Hot Blast.



Michigan Retail Hardware Association, Saginaw, Mich., Aug. 9, 10, 11, 1905. Courtesy of Goodridge Bros., Photographers, Saginaw, Mich.

The Hardware Record.

American Hardware Mnfs. Assn.
Pres., J. C. Birge, St. Louis, Mo.
Vice-Pres., C. W. Asbury, Philadelphia, Pa.; Geo. W. Corbin, New Britain, Conn.; Henry B. Lupton, Pittsburgh, Pa.
Sec.-Treas., F. D. Mitchell, 309 Broadway, New York.
Ex. Com., W. M. Trussig, New York; Sam'l Disston, Philadelphia; Wm. H. Hays, Pittsburgh; John E. Harbster, Reading; Geo. P. Hart, New Britain; W. M. Pratt, Greenfield, Mass.; E. G. Buckwell, Cleveland; E. B. Pike, Pike, N. H.

Arkansas Retail Hdw. Dealers' Assn
Pres., T. B. Stewart, Newport.
1st V.-P., R. P. Allen, Van Buren.
2d V.-P., W. E. Dean, Portland.
Sec. Treas., C. E. Taylor, Little Rock.
Ex. Com. (till June, 1907), Hamp Williams, Hot Springs; R. F. Rays, Russelleville; J. P. Simpson, Malvern; J. R. Mott, Helena; (till June, 1906), Frank B. Gregg Little Rock; C. T. Rosenthal, Batesville; M. Pittman, Prescott.

Chicago Retail Hdw. Dealers' Assn.
Pres., H. E. Gnadt.
V.-P., W. B. Costello.
Sec., G. R. Lott.
Collector, John Hora.
Treas. J. L. Smith.

Illinois Retail Hdw. Dealers' Assn.
Pres., Frank B. McKenney, Rockford.
V.-P., F. Giessing, E. St. Louis.
Sec., L. Nish, Elgin.
Treas., Geo. A. Englehardt, Chicago.
Ex. Com., Frank B. McKenney, Rockford. L. Nish, Elgin; Geo. A. Engelhardt, Chicago; Chas. Johnson, Peoria; F. F. Porter, Chicago; Wm. Bittel, Peoria; H. G. Cormick, Centralia; L. D. Stay, Belvidere; W. T. Gormley, Chicago.

Indian Territory Retail Hdw. Assn.
Pres., A. L. Severance, Durant.
1st V.-P., Geo. W. Mowbray, Tulsa
2nd V.-P., W. J. Pettee, Oklahoma City.
Secy., W. G. Johnston, Oklahoma City.

Indiana Retail Hdw. Dealers' Assn.
Pres., A. N. Shidler, South Bend.
1st V.-P., Chas. Frame, North Manchester.
2nd V.-P., Walter B. Creed, New Albany.
Sec.-Treas., M. L. Corey, Argos.
Ex. Com., W. P. Lewis, New Albany; Chas. E. Hall, Indianapolis; J. L. Fulton, Portland

The Inland Empire Implement and Hardware Dealers' Association.
Pres., C. L. Butterfield, Moscow, Idaho.
1st V.-P., E. E. Lucas, Davenport, Wash.
2d V.-P., Dana Child, Spokane, Wash.
Sec., E. W. Evenson, Spokane, Wash.
Treas., J. A. Fridaker, Spokane, Wash.

Iowa Retail Hdw. Dealers' Assn.
Pres., H. S. Vincent, Ft. Dodge.
V.-P., C. E. Haas, LeMars.
Sec. Treas., A. R. Sale, Mason City.
Directors, T. A. Nichols, Burlington; D. S. Stouffer, Iowa City; E. C. Moore, Waverly; S. R. Mills, Mason City; U. S. Johnston, Tama; R. J. Breckenridge; Brooklyn; L. C. Clifford, Des Moines; F. P. Bollinger, Alton; W. J. Langfitt, Harlan.

Kentucky Retail Hardware and Stove Dealers' Association.
Pres., J. C Frederick, Owensboro.
1st V.-P., U. S. Shacklett, Fulton.
2nd V.-P., George W. Buck, Louisville.
Treas., J. Steitler, Owensboro.
Sec., John R. Sower, Frankfort.

Michigan Hardware Association.
Pres., J. H. Whitney, Merrill.
V.-P., E. B. Standart, Holland.
Treas., Henry C. Weber, Detroit.
Sec., Austin J. Scott, Marine City.
Ex-Com., S. Winchester, Jackson; J. G. Patterson, Detroit; E B. Standart, Holland; E. S. Roe, Buchanan; John Popp, Saginaw; J. B. Sperry, Port Huron; C. M. Alden, Grand Rapids; J. H. Murray, Cadillac; George P. Griffin, Albion; T. Frank Ireland, Belding.

Minnesota Retail Hardware Assn.
Pres., A. T. Stebbins, Rochester.
V.-P., George Evenson, St. Peter.
Sec., M. S. Matthews, Minneapolis.
Treas., G. F. Duerre, Plain View.
Ex-Com., W. H. Tomlinson, Le Sueur; J. H. Smith, Minneapolis; H. R. Schroeder, St. Paul; F. W. Lucas, Litchfield; W. T. Cowing, Alexandria; C. H. Casey, Jordan; Louis Gewalt, Breckenridge; Chas. F. Ladner, St. Cloud; J. F. McGuire, St. Paul; A. T. Stebbins, Rochester; Geo. M. Evenson, St Peter.

Missouri Retail Hardware Dealers' Association.
Pres., Tayler Frier, Louisiana.
V.-P., Wm. H. Hahn, St. Louis.
Sec.-Treas., Frederick Neudorff, St. Joseph.
Ex. Com., F. A. Kannsteiner, St. Louis; W. C. Shoop, Richmond; O. W. Johnston, Marshall.

National Hardware Association.
Pres., S. A. Bigelow, Boston.
Vice-Pres., John C. Koch, Milwaukee.
2nd Vice-Pres., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., R. M. Dudley, Nashville; W. S. Wright, Omaha; W. D. Taylor, Cleveland; F. Barker, Elmira, N. Y; J. D. Moore, Birmingham, Ala; P. E. Strauss, Boston.

National Retail Hdw. Association.
Pres., W. P. Bogardus, Mt. Vernon, Ohio.
1st V.-P., E. M. Bush, Evansville, Ind.
2d V.-P., H. F. Emery, Fargo, N.D.
Sec., M. L. Corey, Argos, Ind.
Treas., A. T. Stebbins, Rochester, Minn.
Ex. Com., T. Frank Ireland, Belding, Mich.; S. R. Miles, Mason City, Ia.; A H. Abbe, New Britain, Conn.; Frank A. Bare, Mansfield, O; C. H. Williams, Streator, Ill.

Nebraska Retail Hdw. Dealers' Asn.
Pres., Max Uhlig, Holdrege.
1st V.-P., Albert Degner, Norfolk
2d V.-P., Frank Haecker, Friend.
3d V.-P., M. A. Hargleroad, Holstein.
Sec., J. Frank Barr, Lincoln.
Treas., H. J. Hall, Lincoln.

N. Dakota Retail Hdw. Dealers' Asn.
Pres., H. F. Emery, Fargo.
1st V. P., Martin Jacobson, Minot.
2d V.-P., H. H. Walters, Casselton.
3rd V.-P., O. I. Butler.
Sec., C. N. Barnes, Grand Forks.
Treas., H. T. Helgesen Milton.
Members Ex. Com., W. R. McIntosh, Bottineau; E. E. Elliott, Sanborn; W. H Pinkerton, Lakota.

Ohio Hardware Association.
Pres., John F. Baker, Dayton.
V.-P., C. S. Johnson, Barberton.
Cor. Sec., Frank A. Bare, Mansfield.
Fin. Sec., A L. Shearer, Dayton.
Treas., L. F. Stahler, Waverly.
Ex. Com., John Kramer, Dayton; C. W. Jewell, Utica; W. S Perry, Zanesville; Frank W. Ingalls, Byran Will M. Crumrine, Salem; A. Boebinger, Cincinnati; John Spoerl, Hamilton; W. F. Jacobs, Youngstown.

Pennsylvania Retail Hdw. Assn.
Pres., Geo. V. Thompson, Mt. Jewett.
V.-P., J. H. Bowers, Charleroi.
Sec.-Treas., J E. Digby, McKees Rocks.
Ex. Com., Joseph M. Selheimer, Lewistown; J. E. Digby, Mckees Rocks; Geo. V. Thompson, Mt. Jewett; Pa.; Geo. L. Moore, Brownsville.

St. Louis Stove Dealers' Assn.
Pres., R. H. Myers.
1st V.-P., E. L. Wachter.
2d V.-P., G. M. Rinie.
Sec., Louis Boehl.
Treas., F. A. Kannsteiner.

Southern Hardware Jobbers' Assn.
Pres., F. B. Dunlap, Ft Smith, Ark.
1st V.-P., J. S. Warren Memphis, Tenn.
2d V.-P., Frank S. Gray, Jacksonville, Fla.
Sec.-Treas., C. B. Carter, Knoxville, Tenn.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

Texas Retail Hdw. and Imp. Assn.
Pres., S. L. Erwin, Honey Grove
Secy. & Treas., J. W. McManus. Waxahachie.
1st V.-P., R. L. Penick, Stamford.
Dir.: T T. Clark, Ennis; H. S Allen, Calvert; W. A. Spangler, Bonham; D. B. McCall, Waxahachie; W. M. Gunnel, Charles Hutchins, Sam Macos.

Wisconsin Hdw. Dealers' Assn.
Pres., Ralph Burtis, Oshkosh.
V.-P., E. Tietgen, Manitowoc.
Sec.-Treas., C. A., Peck, Berlin.
Ex. Com., W. H. Busse, Milwaukee; E. R. Ramm, New London; Jas. Murphy, Racine; H. J. Krueger, Neenah.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 42 to 47 inclusive.

The Corbin Screw Co., of New Britain, Conn., are about to erect a new $50,000 plant.

The plant of the Kokomo Steel & Wire Nail Co., of Kokomo, Ind., was damaged recently to the extent of $50,000 by a storm.

George W. Hoffman, of Kendallville, Ind., has purchased the stock of hardware, stoves, implements and buggies of Cawley & Cawley.

S. J. Wolff is about to engage in the manufacture of razors and knives and an automatic machine for lawn mower grinding at Monmouth, Ill.

It is announced that the Nineteen Hundred Washer Co., of Binghamton, N. Y., are about to establish a branch factory in Germany for the manufacture of washing machines.

Henry T. P. Hopper, Frank Goodwillie, Morris P. Altman, Joseph Soss and John M. Quinn, of New York, are the incorporators of the Soss Sash Balance Mfg. Co., of New York City, capitalized at $100,000.

The sale has been announced of the tool department of the Hurwood Mfg. Co., of Bridgeport, Conn., to the Stanley Rule & Level Co., New Britain. It is understood, however, that the Hurwood Mfg. Co. will continue to manufacture the famous Hurwood lanterns. The price is not generally known, but is supposed to have been eminently satisfactory to the Hurwood Co.

The Sycamore Wagon Works, 109 Edwards St., Sycamore, Ill., announce that an up-to-date hardware delivery wagon will come in handy this fall, when the dealer wishes to deliver stoves and furnaces. The body of the Sycamore wagon is only twenty inches from the ground. The wagon is of the full width, with regular high wheels. At the same time, it will turn as sharply as any cut-under wagon with a reach. This wagon is easily loaded and is light of draft. A complete catalogue will be mailed on request.

The eighth annual convention of the International Acetylene Association, held at the Cadillac Hotel, New York City, beginning August 15th, resulted in the election of the following officers: President, G. W. Mead, Chicago; vice-president, H. I. Ganett, of Omaha, and secretary and treasurer, L. S. Bigelow, of New York City. The meetings were small, but enthusiastic. An energetic campaign was entered upon against the unfair competition of the so-called "tin can" generator manufacturers. These generators were claimed to be unsafe and unprofitable.

G. R. Lott, 1002 West Lake St., Chicago, Ill., the secretary of the Chicago Retail Hardware Association, who is receiving applications for space to be rented to advertisers for the next meeting of the Illinois Retail Hardware Dealers' Association, announces that up to date his efforts at renting space have been quite successful. More than twenty booths have been claimed. The next meeting of the Illinois Retail Hardware Dealers' Association will be held at the First Regiment Armory, Chicago. Mr. Lott will

be pleased to furnish a plat of the building and booths upon request.

Charles E. Mearns, formerly sales manager of Voss Bros. Mfg. Co., of Davenport, Iowa, severed his connection with that concern on August 19th. Mr. Mearns will enter into the manufacture of washing machines for himself at Omaha, Neb. He has been connected with the Voss Bros. Mfg. Co. for the past three years and during this period has succeeded in making firm friends of the many dealers in Ocean Wave washers. Arthur Clifford, formerly with the Excelsior Supply Co., of Chicago, is Mr. Mearn's successor. Mr. Clifford has had seven years of experience in the Chicago concern. He comes with an excellent reputation and with good prospects for equaling the record of his popular and clever predecessor.

C. A. Peck, secretary and treasurer of the Wisconsin Retail Hardware Association and secretary of the Hardware Dealers' Mutual Fire Insurance Co. of Wisconsin, announces that, on August 17th, the executive committee of the hardware association met at Oshkosh, Wis., and mapped out the program for the next, the tenth annual convention. It is the desire of all to make the next meeting better and more popular than any of its predecessors. They propose to use the West Side Turn Hall, at Milwaukee, for their assembly. They will give over the second floor for exhibits, in charge of the Milwaukee hardware dealers' local association. This latter body will rent out the space and hopes to furnish better accommodations at more reasonable figures than heretofore. The meetings of this body have outgrown the hotel accommodations, and there seems to be a universal desire for larger quarters.

ECONOMY IRON HEATER.

The dictum of the universe is now total or almost total avoidance of waste—waste of energy, waste of food, waste of time, or waste of fuel. Efforts to cut

Economy Iron Heater.

down the waste item are evidences of the proper enthusiasm and spirit in commercial endeavor.

The Economy Iron Heater Co., postoffice box 4, Keokuk, Iowa, offer for sale the Economy iron heater and combination cooker, shown in the accompanying illustration. This is said to minimize the coal bill, combining as it does in one process the benefits of fuel usually expended upon two separate processes. It is a simple device which heats flat irons and cooks on one burner. It is said to be quicker and hotter than an open burner, and if one is not ironing, a utensil may be put inside and another on top, which is said to double the value of the burner. The makers claim that the heater more than pays for itself in one month. Dealers are requested to write for further information, and to mention THE AMERICAN ARTISAN.

ARROGANCE NOT HUMILITY.

Arrogance, not humility, is recommended by Schofield & Co., Freeport, Ill., for the housewife. Housewives who would stoop so low as to use an ordinary dust pan are heartily condemned by this prosperous concern, and advised to mend their ways. The Twentieth Century dust pan is said to be a panacea for the humble ways of the stooping maid. It is said to entail no backaches on the part of the operator and at the same time to be thoroughly practical. The makers claim that it can be pressed so tightly to the floor as to take up all the dust. When raised, the dust falls into a pocket, and can be carried in this manner from room to room. It is made of steel and will, it is said, last as long as ten ordinary dust pans. These dust pans are packed six dozen in a case. The shipping weight of each case is seventy pounds.

Twentieth Century Dust Pan.

Schofield & Co., of Freeport, Ill., will be pleased to furnish additional information upon request. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

CATALOGUES WANTED.

The Tool Co., Atlanta, Ga., announce that they are about to open an exclusive retail and wholesale tool and cutlery store at 5 Viaduct Place in that city. This is a new departure in the hardware business in that The Tool Co. will carry only tools used by all classes of tradesmen, such as carpenters', mechanics', plumbers', electricians', cabinet-makers' stone cutters', blacksmiths' and butchers' tools. In the cutlery line they will carry large lines of pocket knives, razors, shears and scissors. This company are of the opinion that they are the only dealers in tools and cutlery exclusively in the United States. The company was incorporated under the laws of the state of Georgia, with an authorized capital stock of $25,000. Their store is completely "warrenized." Albert E. Hill is president, C. M. Reynold is treasurer, and L. S. Holley is secretary. They will be pleased to have all manufacturers and jobbers in the tool line furnish them with catalogues and prices.

Purves & Wilkinson, 1810 Market St., Philadelphia, Pa., Eastern agents for the C. H. Wurst Co., of Quincy, Ill., have dissolved and the business will be conducted in the future by E. D. Purves, under the firm name of E. D. Purves & Co. Mr. Purves is anxious to receive catalogues from manufacturers of gas and oil heaters.

THE CHICAGO ASSOCIATION.

At a meeting of the Chicago Retail Hardware Association, held in the Masonic Temple, at 8 p. m., on August 25th, the picnic committee made its final report, requesting that settlements be made for tickets not accounted for. The buying committee received orders for fire shovels and these will be bought in accordance with the co-operative policy of the association.

This association has made arrangements with the Merchants' Association of Chicago to collect the slow accounts of its members at the following rates: Twenty per cent on accounts of ten dollars or less; fifteen per cent on all accounts above ten dollars when collected.

FAR ABOVE THE AVERAGE.

Even the most cursory examination of some of the circulars published and copyrighted by Butler Bros., of Chicago, will not fail to reveal the fact that the publishers are willing to risk present loss for future gain and to help their customers, firm in the belief that, by thus giving aid, they will eventually receive aid.

"The 5 & 10 Cent Business" is the title of one of these circulars. It enters into an analysis of the causes of success and failure in these lines, explaining how "The 5 & 10 Cent Business" can be made profitable when employed exclusively or only partially. It is not too much to say that this booklet reads like a novel. It is not too much to say that, compared with perhaps fifty per cent of the novels published to-day, it is decidedly more preferable. The ways and means by which many of the more successful 5 and 10 cent dealers have acquired substantial fortunes and have spread their fame and their name throughout the country are in themselves interesting reading. Any analytical study of the reasons why some men succeed and some men fail in life are interesting *per se*. When these causes are presented in an especially inviting manner, when remarkable data from the whole country are gotten together into one booklet, when a carefully trained and logical mind separates the causes from the effects and draws conclusions from both, it is but natural to expect that the result will be more pleasing than a hastily constructed romance. The one is life; the other, a dream.

Perhaps a few of the more extraordinary means by which merchants have advertised will not be in apropos. The following are excerpts from the many methods given:

"Buy a lot of husking mittens and mail one to each farmer on your list, stating that he can have the other one free by calling at your 5 & 10 cent department. Use hosiery the same way for women."

"Induce a couple to get married in your window, and as a gift present them with $10.00 worth of goods from the 5 & 10 cent department."

"Sell a seventy-five cent wash boiler for one cent, with the condition that the purchaser buy $10.00 worth of merchandise during the course of two months."

"Have a picture of yourself cut into many small pieces and printed in the newspaper. Offer a prize of any article in the 5 & 10 cent department to the people who will bring the picture into your store properly pasted together."

"Offer to give the choice of any article in the department to every child who will bring in a cat. State that you merely want to borrow the cats. Tie a ribbon and tag advertising the department to each cat. Put them in the window and turn them loose on a certain day."

Butler Bros., of Chicago, publish a great many other interesting booklets which would undoubtedly prove of supreme interest to dealers, whether engaged in "The 5 & 10 Cent Business" or not. They will be pleased to furnish these upon application. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

A NEW ASSSOCIATION.

At the annual meeting of the Southern Supply and Machinery Dealers' Association, held at Savannah, Ga., April 25th and 28th last, a call resulted in the formation of a new organization which was eventually named the American Supply and Machinery *Manufacturers'* Association. A constitution and by-laws were adopted and officers elected. The members had formerly been honorary members of the Southern Supply & Machinery *Dealers'* Association. This latter organization co-operated most heartily with the infantile organization and was responsible for the success of the movement in no small measure. Officers of the American Supply & Machinery Manufacturers' Association elected at that meeting were as follows:

President, Edward C. Hinman, Battle Creek, Mich., American Steam Pump Co.; vice-presidents—first, M. W. Mix, Mishawaka, Ind., Dodge Mfg. Co.; second, Charles F. Aaron, New York City, New York Leather Belting Co.; third, John J. Voorhees, Jersey City, N. J., Voorhees Rubber Co.; secretary-treasurer, F. D. Mitchell, 309 Broadway, New York City; advisory board—Samuel L. Moyer, Cincinat-, Ohio, the Lunkenheimer Co.; N. A. Gladding, Indianapolis, Ind., E. C. Atkins & Co., Inc.; M. W. Mix, Mishawaka, Ind., Dodge Mfg. Co.; executive committee—Samuel L. Moyer, chairman, Cincinnati, Ohio, the Lunkenheimer Co.; S. P. Browning, Maysville, Ky., the Ohio Valley Pulley Works; N. A. Gladding, Indianapolis, Ind., E. C. Atkins & Co., Inc.; Charles P. King. Lebanon, Pa., American Iron & Steel Mfg. Co.; Joseph H. Grubb, Pittsburg, Pa., Hussey-Binns Shovel Co.

The following letter is being sent to the former honorary members of the Southern Supply & Machinery Dealers' Association by secretary and treasurer, F. D. Mitchell, of the newly organized association. This letter is as follows:

To the Honorary Members of the Southern Supply and Machinery Dealers' Association:

Dear Sirs:

Pursuant to a call sent out several months ago, a meeting of the Honorary Members of the Southern Supply & Machinery Dealers' Association was held at Savannah, Ga., April 25-28, resulting in the formation of a new organization under the title: "American Supply & Machinery Manufacturers' Association," which was organized with the election of the officers shown on this letter-head, to serve for a period of one year, and the adoption of a Constitution and By-laws, copy of which is enclosed herewith.

We also enclose copy of a letter received from Mr. John

G. Christopher, president of the Southern Supply and Machinery Dealers' Association, which clearly shows the attitude of that association towards the new Manufacturers' association, and as the former "Honorary Membership" list has been abolished, manufacturers of machinery and supplies are invited to apply for membership in the new American Supply & Machinery Manufacturers' Association, using application blank enclosed herewith.

Upwards of one hundred concerns engaged in the manufacture of machinery and supplies were represented at the organization meeting at Savannah; all assisted in effecting the permanent organization, and it seemed to be the general belief that this will become one of the strongest trade associations in this country. While it was formed at the suggestion of the Southern Supply & Machinery Dealers' Association, its scope is sufficiently broad to admit of its co-operating with the other, and similar organization now existing or to be formed, and its annual membership fee of $25 was fixed with a view to providing sufficient revenue to cover the necessary expenses, and effectively promote the interests of its membership.

Doubtless you have noted with interest the recent formation of a National Supply & Machinery Dealers' Association, and are more or less familiar with the efforts making or looking to the organization of sectional dealers' associations in various parts of the country, and may have already received communications carrying recommendations as to the methods which you should use in the distribution of your products. The formation of a Manufacturers' association follows naturally; without binding any of its members to any definite agreement or plan, yet the American Supply and Machinery Manufacturers' Association provides, through its advisory board and otherwise, the "machinery" whereby evils or unsatisfactory conditions of trade may be modified, and in some cases eradicated, which its members acting separately and alone would be helpless to oppose.

We would attract your thoughtful consideration of Article VIII., Sec. C, of the Constitution and By-laws enclosed herewith, which has been carefully framed with a view to providing a method whereby, in matters of trade abuse or otherwise, the interests of *members* will be fully represented when such matters come up for consideration by any dealers' organization, and we might add that so far as your secretary-treasurer has been able to ascertain, this provision for equal representation of all parties in interest at such meetings of the respective advisory boards will receive the hearty indorsement of all organized dealers in supplies and machinery.

We cordially invite your application for membership in this organization, and hope to receive your early and favorable reply.

The letter from John G. Christopher, president of the Southern Supply & Machinery Dealers' Association, mentioned in Mr. Mitchell's letter, is as follows:

To the Honorary Members of the Southern Supply & Machinery Dealers' Association.

Gentlemen:

At our last convention held in Savannah April 25-28, the manufacturers of goods handled by members of our association formed themselves into an association, the aim and object of which, meeting with the approval of the members of the Southern Supply & Machinery Dealers' Association, hence, it was decided that our honorary list should be discontinued, as so many of our honorary members had and would become members of the Manufacturers' association. Therefore, beg to thank you for your kind consideration of our association, and strongly urge that you file your application for membership with the Manufacturers' association.

Printed matter and other forms will be sent you by Mr. F. D. Mitchell, 309 Broadway, New York City, who is the secretary-treasurer of the Manufacturers' association.

RETAIL HARDWARE DOINGS.

BUSINESS CHANGES.

Sweetwater, Tenn.—King Jones, John Bradley and T. B. Guthrie succeed McCaslin & Jones.

New Castle, Ind.—The Carpenter Hdw. Co. succeed Carpenter & Souder.

Osceola, Ia.—The Iowa Hdw. Co. succeed Jas. A. Denly & Co.

Keota, Ia.—O. K. Stoutner & R. B. Dunchee succeed Bower Bros.

Benton Harbor, Mich.—C. E. Dickinson succeeds Mrs. E. F. Platt.

Kalamazoo, Mich.—A. B. Poet succeeds the Sperry Hdw. Co.

Princeton, Ind.—The Morgan-Barndollar Co. succeed Robert Ingle.

Howell, Mich.—C. G. Jewett; discontinued.

La Port, Ind.—Charles F. Peterson succeeds Henry Wilhelm.

Wheeling, W. Va.—T. A. Armstrong succeeds Warren & Armstrong.

Atlanta, Neb.—C. A. Hedlund & George Reed succeed Falk Bros.

MISCELLANEOUS.

Pensacola, Fla.—Welles-Kahn Co.; fire, loss $8,000.

Rushville, Ill.—Neill Hdw. Co.; stock to be sold at public vendue.

Sweetwater, Tenn.—Guthrei, Bradley & Co.; fire loss, $10,000; insurance, $5,000.

Halifax, S. C.—George Smith & Co.; fire loss $35,000.

Harrietta, Mich.—Barry Bros. & Curtis; addition of hardware.

Bardwell, Ky.—D. R. Cotner; damaged by fire.

Manhattan, Mich.—Bergan Bros.; fire loss $8,000; insurance, $2,500.

Morristown, Ind.—J. H. Hoffman, bankruptcy.

Indianapolis, Ind.—Wm. Watson Hdw. Co., assigned.

Sedalia, Mo.—J. M. Dobel, addition of hardware.

Celina, Ohio.—Feldheiser & Bryson, fire loss.

Celina, Ohio.—Kerusch Hdw. Co., fire loss.

Elkins, W. Va.—Schell Hdw. Co., explosion.

Shoals, Ind.—J. T. Morris & Co., assigned.

Minneapolis, Minn.—James T. Anderson, deceased.

Perryville, Mo.—Caldwell & Dennis have consolidated with James Mayo.

Manhattan, Ill.—M. Bergen & Bro., fire loss.

Monroeville, Ind.—Schaub & Wierman; addition to building.

Grand Haven, Mich.—Clernelius Vanden Boomgard; deceased.

Grass Lake, Mich.—W. F. Shaler; deceased.

Clarence, Mo.—J. Robert Hord; deceased.

Riverton, Ia.—McKissick & Wynn; discontinued.

Kansas City, Mo.—The Bell File & Rasp Co.; capital stock increased to $10,000.

Connell, Wash.—Sohm Bros.; fire, loss $20,000; ins. $5,500.

Davenport, Wash.—A. Knox; fire.

Grand Forks, B. C.—W. K. C. Manley; fire.

Omaha, Neb.—Mrs. Clara V. Kibbe of the Western Tinware Co.; deceased.

Lincoln, Neb.—Patterson-Crossby Hdw. Co.; incorporated with capital stock of $50,000.

Winfield, Kas.—W. H. Coffin; deceased.

Lincoln Center, Kas.—Troup & Robinson; fire.

Oelwein, Ia.—Field Hdw. Co.; dissolved.

Bowling Green, Ky.—Barnett Hdw. Co.; new location.

Cheyenne, Wyo.—Roedel Hardware store; burglarized.

Sioux City, Ia.—The Sioux City (Iowa) Hdw. & Heating Co.; bankruptcy.

Atchison, Kas.—W. H. Lewis, burglarized.

Allentown, Pa.—M. S. Young & Co.; new location.

Custer, Mich.—W. E. Reader & Co.; new warehouse.

Iron Mountain, Minn.—Will G. Sundstrom; fire.

Ashville, Ohio—Clement J. Mathys; bankruptcy.

Hankinson, Minn.—M. A. Wipperman; burglarized.

Vacaville, Cal.—Schroeder-Lawrence Hdw. Co.; new building.

Manitowoc, Wis.—Krumdick & Clark; fire; loss $1,500.

Davenport, Ia.—Hinrichs Crockery Co.; fire.

Heating and Ventilating

A REVOLUTION.

At the present time there are being sold many furnaces with so-called "horse shoe" radiators. Many of these have not been successful, because of a lack of durability and a wastefulness in fuel consumption, due to a direct travel of the products of combustion from the front of the radiator and thence through the smoke pipe.

Wastefulness in fuel consumption and lack of durability were the defects which R. J. Schwab & Sons Co., of Milwaukee, set out to overcome when they designed the new Gilt Edge Radium furnace, for coal and wood, lately placed upon the market. This furnace is said to be entirely new so far as regards the science of hot air heating, and will, it is claimed, revolutionize the methods of the past. The fact that so

Gilt Edge Radium.

large a percentage of the heat arising from the source of combustion is lost struck them as peculiarly unsatisfactory. The Gilt Edge Radium furnace is said to utilize more of the heat which has heretofore been wasted than other forms of furnace construction.

The radiator used in the Gilt Edge Radium furnace is very similar in appearance to the "horse shoe" style, but is said to be far superior in a number of features. The older "horse shoe" type furnaces are built in a so-called universal form. This feature is said to bring the flame from the coal directly against the feed door, making it very hot and radiating a great deal of heat into the basement. They are also said to send the products of combustion around the two front bends and only about one-third of the way around the circumference of the large radiator on either side of which is the smoke pipe. The radiator of the Gilt Edge Radium is of an entirely different construction. The gases rise from the fire-pot directly to the top of the dome. Instead of being drawn forward to the feed door and passing in two sheets through the radiator to the smoke pipe, they move upward to the top of the combustion chamber. There they are ignited and then passed to the rear through a cast iron collar between the dome and the outer radiator. By this means the short circuit is obviated. The products of combustion are held in the dome a sufficient length of time to create perfect combustion. As they pass from the dome out of the rear, two things are accomplished: the heat is drawn from and not directed toward the feed door, thus saving the loss through radiation into the basement; and secondly, the gases rising from the burning coal are held in the dome directly over the fire a sufficient length of time to get a large percentage of heat-producing material from the gases and smoke, which very often goes to waste.

The radiator of the Gilt Edge Radium is divided into an upper and lower smoke passage, by means of a cast iron dividing plate. This plate extends through the radiator toward the front, and all the products of combustion, after passing through the dome into the radiator, are obliged to travel through the upper section and then down through the lower section to the rear end before entering the smoke pipe. Thus the products of combustion travel perhaps double the distance traveled in many other furnaces.

The fact that this radiator is divided in half, making both the upper and lower halves fifty per cent smaller than the entire radiator, allows the products of combustion when passing through to heat the entire surface of each passage. Without this dividing line, the products of combustion would heat only one-half, or, at most, two-thirds, of the surface of the passage, which would thus be double the size of either passage in the Gilt Edge Radium. Thus by the new system the products of combustion are said to be utilized more fully than by the use of one passage.

The Gilt Edge Radium is said to prevent a short circuit between the fire bed and the entrance to the radiator, and is said to lengthen the period of time during which the flames will give the furnace the benefit of their heat. The outlet for the flames is at the rear instead of at the front of the furnace. The draft entering the furnace is admitted through the front.

In the construction of the Radium furnace, the Gilt Edge double Key Stone joint is employed exclusively. This joint is said to obviate the common objection to radiators in which the steel plate drums are not complete cylinders. Joints not sealed hermetically are serious objections, because of the unusually large amount of steel plate used in the construction. After experimenting with various joints, R. J. Schwab & Sons Co. are said to have discovered that the Patent Key Stone joint is the only one positively and permanently gas tight. Others are said to be defective because of the expansion and contraction of steel and cast iron, the packing soon dropping out and leaving a leaky joint.

Extraordinary care, a vast amount of study and experience and practical knowledge, resulting from the long career of R. J. Schwab & Sons Co. as furnace manufacturers, have been made use of in designing the Gilt Edge Radium. Besides the unique construction of the radiator and its practical value, the dome

of the Radium furnace is made of number eight and number ten gauge steel. The stalwartness of all the parts liable to destruction and the use of the Key Stone joint are said to make this furnace comply with all requirements of people who expect that a furnace, after being properly installed, will last at least a reasonable length of time.

Besides the Gilt Edge Radium, R. J. Schwab & Sons Co. have lately introduced the Gilt Edge Badger. This furnace was designed to meet the wants of those desiring a furnace for burning hard coal exclusively; one that combines all of the features considered requi-

Gilt Edge Badger.

site in a convenient, effectual and economical heater; thoroughly high grade in every respect, and yet sold at a moderate price.

It is built with a solid base plate, a large, roomy ashpit and a heavy sectional fire-pot. The large ashpit door opens up the full length of the ashpit, making it convenient for removing ashes and getting at the grate when necessary.

On the top of the upper fire-pot rests a cast iron body and feed spout cast in one piece. This body is twelve inches to fourteen inches in height. A large combustion chamber is said to be of vital importance to the economical and successful working of a furnace, allowing the products of combustion to remain longer within the furnace than a small bell-shaped dome. The combustion chamber of the Gilt Edge Badger is ample in size.

After the products of combustion have been ignited, they pass through the cast iron collar into the outer radiator, and are then obliged to pass around the entire circumference of the radiator and then back. The smoke pipe is placed as low as possible on the radiator, compelling the products of combustion to cover the entire surface.

While the dome and radiator are very high, the furnace itself is not high. They are brought down close to the fire; thus more space in the air chamber is utilized for radiating surface.

R. J. Schwab & Sons Co., Milwaukee, Wis., will be pleased to send their new catalogue describing these furnaces to all dealers. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

PARAGRAPHS.

The Sloan Heating & Plumbing Co., of Pittsburg, Pa., have secured a large building at 6307 Broad St., and will make a more extended bid for steam and hot water heating contracts.

Arthur T. Beach, of Brooklyn; Nathan B. L. Casel and Manuel A. Kursheedt, of New York City, are the directors of the Beach-Russ Co., New York City, capitalized at $25,000, for the purpose of dealing in gas furnaces, gas irons and steel products.

Paul Reily, William Muneville, of Philadelphia, Pa., and William S. Darnell, of Camden, N. J., are the incorporators of the McGovern Mfg. Co., Camden, N. J., capitalized at $100,000, for the manufacture of grates, grate bars and other forms of iron and steel.

The Walworth Run Foundry Co., Empress, Filmore and Talcott Sts., Cleveland, Ohio, believe that there are many points of superiority in their registers. These are said to be neat in design, perfect in movement, durable in construction and elegant in finish. The prices are said to be reasonable, the stock always complete, the shipments prompt, and the quality guaranteed.

Wisconsin furnaces are the subject of a catalogue recently published by the Phipps Furnace Co., Milwaukee, Wis. These furnaces are made for coal and wood, with a return flue radiator. Only first quality material is said to enter into the construction of these furnaces, and it is said to be the policy of the makers to create a trade which will prove a valuable investment in the future.

The Monroe Foundry & Furnace Co., of Monroe, Mich., manufacture a complete line of furnaces in all the different styles in which these apparatus are usually made. Their combination heater, placed on the market not long ago, has been meeting with great success wherever introduced, and users claim to be more than satisfied. Floral City hot water and steam boilers are said to fill the wants wherever this manner of central heater is popular. The manufacturers carry a full line of round and sectional water and steam boilers.

F. B. Raymond, salesman for the Thatcher Furnace Co., New York City, died on August 16th. Mr. Raymond had been in the employment of the Thatcher Furnace Co. for fifteen years and was fifty-three years old. He lived at Newark, N. J. He had gone to the Adirondacks for his health, but the quest was unavailing. His body was cremated on August 18th. Mr. Raymond was a courteous gentleman, conscientious and popular. He was well known throughout the trade as much for his personal magnetism as for the sterling integrity which characterized all of his business and personal transactions.

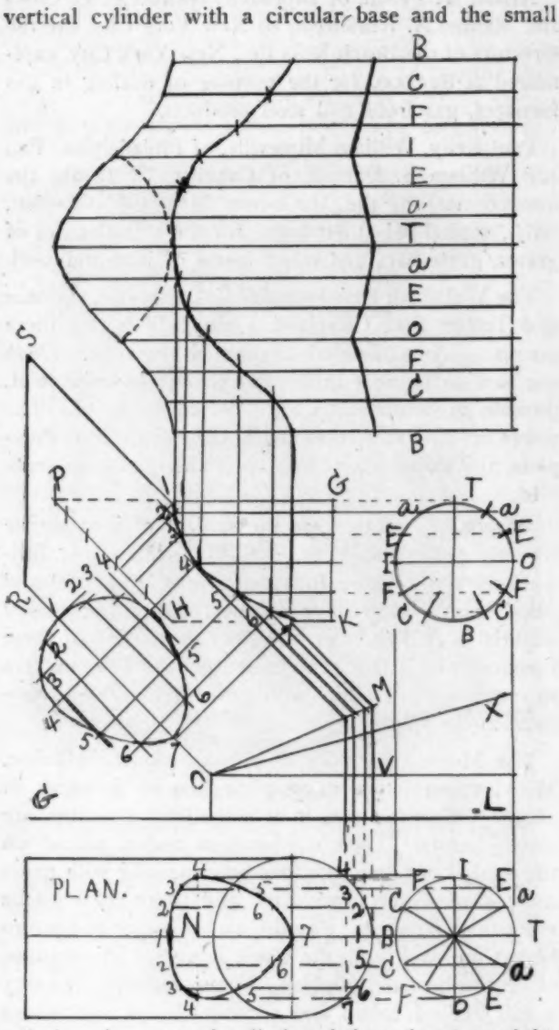
Tinshop

INTERSECTIONS OF CYLINDERS.

Replying to the question of F. H. Schanze, 602 West 12th St., Chicago, we submit the following:

The illustration shows a cylinder R-S-O-M inclined to the horizontal plane, at an angle of 45 degrees, intersected by a vertical cylinder O-M-V, whose base is a circle, as shown by figures 1-2-3-4-5-6-7 and N in plan.

The inclined cylinder is also intersected by a smaller cylinder shown in elevation by P1-G-H-K. The illustration also shows the intersection between the vertical cylinder with a circular base and the small



cylinder, the axes of cylinders being placed at right angles.

The small cylinder P1-G-H-K is intersected by the cutting plane P-H. The pattern is a two-piece elbow square in plan. The small cylinder is also intersected by the cutting planes 4H and 4I. The pattern is a tee joint, square in plan.

SOLUTION ON DRAWING BOARD.

G-L is the ground line. Construct the elevation of the inclined cylinder R-S-O-M and the vertical cylinder O-M-V; also construct the elevation of small cylinder P1-G-H-K. In the elevation draw the circle TA-EO-FCB, and through those points of division draw horizontal lines parallel to the line P-I-G, so as to intersect the cutting plane P-H.

Draw the plan of the bases of the cylinders and divide the base of small cylinder into the same number of points as the small circle in elevation. You will notice the changed position of the letters. In the elevation T is at the top line, while in the plan, line T passes through centers of both bases. We will explain how this comes. Consider the line I-O in plan and line T-B in elevation as being hinged to the paper; revolve each circle to the left, then the semi-circle in plan. 1-E-a-Ta-EO will be above the paper, the other half of the circle will be below the paper. In the elevation the semi-circle to the right of hinge T-B will be above the paper, the other half will be below the paper. Now consider line G-L as a hinge; revolve the elevation towards you until the elevation of the drawing is vertical. By placing center of elevation directly over center of plan the lettering is the same in each circle. Through the points of division in small circle in plan draw lines parallel to the axes of cylinders, intersecting the base of large cylinder in 1-2-3-4-5-6-7. Through those points draw vertical lines, intersecting cutting plane O-M, and continue the lines, parallel to line S-M in inclined cylinder.

Mark the points 1-2-3-4-5-6-7 where the inclined lines meet the horizontal lines previously drawn through points in horizontal cylinder. Lines traced through the points will give the shape of the intersection.

PATTERNS.

Draw a vertical line and space the distances between the points of division on small circle in elevation, as BCFO-EA-TA-EI-FCB. Draw pattern lines through those points as shown.

Through the points of intersection 1-2-3-4-5-6-7 draw vertical lines, intersecting pattern lines as follows: Line 1 intersects line T in pattern; line 2 intersects line a-a, line 3 intersects line EE, line 4 intersects line O-1, line 5 intersects line FF, line 6 intersects line CC, line 7 interesects line BB. Lines traced through the points give the pattern of the intersection.

Draw vertical lines through points 1-2-3-4-5-6-7 at base of large cylinder in plan to meet the pattern lines; will give pattern for intersection of small cylinder and large cylinder as shown. To avoid confusion we only drew the lines to intersect OM.

To obtain the shape cut from the large cylinder by looking at plan of base of large cylinder, the lines extend from 1 to 2-3-4 and to 5-6-7. Draw a line perpendicular to line RO and space the distances 1-2-3-4 on each side; draw lines through the points 1-2-3-4 parallel to line RO; now draw lines through the points of intersection 1-2-3-4-5-6-7, perpendicular to the pitch of cylinder, to intersect the lines previously drawn in points 1-2-3-4-5-6-7 on each side of line RO. This shape can be cut out of large cylinder. To obtain the square elbow pattern, draw vertical lines through the points on line PH to intersect pattern lines. A projected view of the intersection is shown in plan at N. The pattern for the tee joint is found by taking square elbow pattern and turning

over the center portion between O and 1, the oval shape between elbow pattern and tee joint is the shape to be cut out of the cylinder that the tee joint intersects.

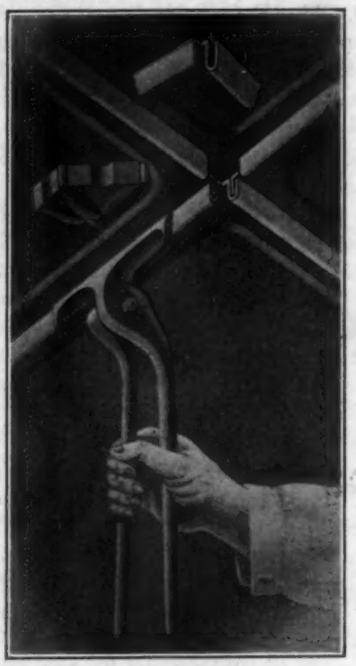
REMARKS.

The line O-M is an intersecting line for an octagon mitre; the line O-X is an intersecting line for another angle. At O you can place any angle, and by drawing vertical lines from the base of large cylinder you can obtain a pattern of the intersection by laying out the pattern lines to the right of the drawing.

The solution of this illustration applies to all intersections between cylinders, as the position of a cylinder cuts no figure in an intersection.

LOCK JOINT CEILINGS.

In spite of the many advantages of metal ceilings over plaster and the other forms of ceilings the former are said to possess some disadvantages, including those caused by the drying out of joists and consequent stains caused by smoke and dust. The S. Keigley Metal Ceiling Mfg. Co., of Pitsburgh, with branches at Chicago and Elmira, New York, manufacture what are called Lock Joint metal ceilings. These are said



Lock Joint Ceilings.

to do away with smoke and dust stains by means of an air and water tight construction. When the joints dry out and warp they cannot, it is said, spring openings in the seams between the nails as they do with the lap joint. The suction of air through those openings is said to deposit dust and smoke particles, which make frequent washing or re-painting necessary. This cleansing is said to be expensive and undesirable. The Keigley metal ceilings are said to do away with this defect by means of their air tight construction. This firm make a lap joint ceiling also.

They do not employ traveling men and claim to give their customers the benefit of the saving thus made. They make ceilings and side walls exclusively and concentrate their energies upon the production of these goods. They will be pleased to furnish dealers with descriptive matter upon request. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

FIRST MEETING OF NATIONAL SHEET METAL WORKERS.

The first annual meeting of the National Association of Master Sheet Metal Workers was held at Milwaukee, beginning August 9th. The meeting was a decided success in point of enthusiasm, if not in point of numbers. The attendance was cosmopolitan, over twenty states being represented. This association, though young, promises to become one of the largest and most powerful trade organizations in the country. Edwin L. Seabrook was re-elected president at the meeting, Paul L. Biersach was re-elected first vice-president, W. H. Barnard was re-elected secretary, and E. R. Richards was re-elected treasurer. At the meeting a constitution was drawn up, commented upon and adopted. Papers were read on subjects of interest to tinners, roofers and hot air furnace fitters.

NOTES AND QUERIES.

STEEL SQUARES.

From Charles Blomberg, Chicago.

Kindly recommend a book on steel squares for use of tinners.

Ans.—"Steel Square and Its Uses," by F. T. Hodgson; 12mo., 80 pages, 65 illus.; price, $1.00. Part I is for carpenters; Part II for tinners and allied craftsmen. For sale by Daniel Stern, 69 Dearborn St., Chicago.

QUICK MEAL STEEL RANGES.

From C. G. Ballthorn, Welcome, Wis.

Who makes the Quick Meal steel ranges?

Ans.—Ringen Stove Co., St. Louis.

SOLDER FOR ALUMINUM.

From John A. Powell, South Wayne, Wis.

Kindly give me the recipe for solder to be used with aluminum.

Ans.—The composition of solders for aluminum that is generally used is as follows:

(1) 80 parts zinc; 12 parts aluminum; 8 parts copper.
(2) 88 parts zinc; 7 parts aluminum; 5 parts copper.
(3) 94 parts zinc; 4 parts aluminum; 2 parts copper.
(4) 90 parts zinc; 6 parts aluminum; 4 parts copper.
(5) 85 parts zinc; 9 parts aluminum; 6 parts copper.

First prepare an aluminum-copper alloy, which is to be mixed with the requisite amount of zinc. Melt the copper and then gradually introduce into same the aluminum, divided into 3 or 4 portions; make a perfect mixture by stirring. After the last of the aluminum has been put in, throw in the zinc and with it some fat or resin, then stir the mass rapidly and directly remove the crucible from the fire and pour the alloy into iron molds, which have been rubbed with benzine or cold tar oil.

MANTEL GRATES.

From Kelley & Neal, Farmington, Iowa.

What firms make mantel grates?

Ans.—Chattanooga Implement & Mfg. Co., Chattanooga, Tenn.; Ironton Wood Mantel Co., Ironton,

Ohio; Chattanooga Roofing & Fdy. Co., Chattanooga, Tenn.; Murdock Corporation, Boston, Mass.; Dawson Bros., 197-207 N. Halsted St., Chicago; Wm. H. Hoops & Co., 10-12 Monroe St., Chicago; C. Ehman & Co., 1201 W. Superior St., Chicago; Chas. L. Lorenzen & Co., 278 N. Ashland Ave., Chicago; G. L. Peterson Co., 281 N. Sangamon St., Chicago; West Side Mantel Co., 398 W. Chicago Ave., Chicago, and the Phillips Mantel & Clock Co., Grand Rapids, Mich.

"SHIPS FOR OCEAN."

From Charles C. Meyer, Belleville, Ill.

Kindly tell me the price of "Ships for Ocean and River Service."

Ans.—12mo, atlas, illus.; price, $3.50; by H. A. Sommerfeldt; for sale by Daniel Stern, 69 Dearborn St., Chicago.

"SHIPS AND BOATS."

From Charles C. Meyer, Belleville, Ill.

Kindly give me the price of "Ships and Boats."

Ans.—12mo, illus., limp; price, 75c; by W. Bland; for sale by Daniel Stern, 69 Dearborn St., Chicago.

SHEET METAL PATTERNS.

From A. C. Slaessigen, Ballard, Wash.

Kindly recommend a book on pattern cutting.

Ans.—"Gray's Perfect Elbow Patterns," three editions, prices, $1.00 or $2.00; "Gray's Perfect Skylight Patterns," price $3.50; "Tinsmiths' Pattern Manual," by J. K. Little, price $3.50; "Sheet Metal Workers' Guide," by W. J. E. Crane, price 60c; "100 Tinners' Patterns, price $1.00; "Pattern Makers' Handybook," by P. N. Hasbeck, price 50c; "Metal Plate Work," by C. T. Willis, price $3.50; "Metal Plate Work," by L. J. Blinn, price $2.50; "Metal Plate Working," by I. R. Butts, price $1.25; "Metal Plate Work," by R. H. Wain, price $3.00. All of these works are for sale by Daniel Stern, 69 Dearborn St., Chicago.

ITEMS.

The National Lead Co., of New York City, have increased their capital stock from $30,000,000 to $50,000,000. It is supposed that this move was made in order to absorb the United States Lead Co.

Walker & Wilcox, sheet metal workers, of Pittsburg, Pa., who started in business about three years ago in a fairly modest way, have increased their plant by two buildings, and are now about to erect a third, which will double their present capacity.

M. Ledwidge, of Follansbee Bros. Co., Pittsburg, was a recent caller at THE AMERICAN ARTISAN office. Mr. Ledwidge's aggressive policy is accomplishing much toward making the many grades of tin plate manufactured by the Follansbee Bros. Co. known in every town and hamlet in the country.

Dodd & Struthers, of Des Moines, Iowa, the well-known manufacturers of copper cable lightning rods, have been incorporated, with a capital stock of $750,000. This firm was established eight years ago, but during their short period of existence their business has grown to tremendous proportions, owing solely, it is said, to the inert value of their product.

The convention of the Amalgamated Sheet Metal Workers' Alliance adjourned on August 13th at Washington, D. C., after having fixed upon Atlantic City, New Jersey, as the place for holding the next meeting in July, 1907. M. O. Sullivan of Pittsburgh was elected president. A resolution was passed giving the copper workers a representation in the alliance, although further action must be taken before this act can be ratified.

The Ohio Galvanizing & Mfg. Co. of Niles, Ohio, manufacture galvanized steel sheets, ice cans, street cleaning cans, ash and garbage cans, shop cans, steel tanks, mortar buckets, brick carriers, coal shutes, plate washers, shingle bands and brick pallets. They are also fully equipped to handle all kinds of sheet metal work in either black or galvanized steel, working as heavy as number 11 gauge. They will be pleased to furnish additional information upon request. "When writing kindly add: "Saw it in THE AMERICAN ARTISAN."

The J. E. Whitacre Mfg. Co., of Rockford, Ill., have increased their jobbing business extensively during the last few months. To their already large list of jobbing customers they have added the following: John Weekes & Son, Watertown, N. Y.; Lincoln Iron Works, Rutland, Vt.; Garry Iron & Steel Co., Cleveland, Ohio; F. O. Schoedinger, Columbus, Ohio; Van Camp Hardware & Iron Co., Indianapolis, Ind.; Friedley & Voshardt, Chicago, Ill.; Farwell, Ozmun, Kirk & Co., Minneapolis, Minn.; J. Wilton Jones, New Orleans, La.

Banfield Best Bright, Gilbert, Rosedale, Haynes, Clifton and Furnace Coke are brands of bright tin made by the Follansbee Bros. Co. of Pittsburgh. These tins are made in uniform quality, all sizes and all weights. They are sold both in primes and in wasters. Scott's Extra Coated roofing tin has been sold in this country for more than twenty years. It is now used on a great number of important buildings and is said to be of great favor with architects and the trade. Follansbee Banfield Process roofing tin is warranted for fifteen years.

The St. Paul Roofing, Cornice & Ornament Co., of St. Paul, Minn., send us a special invitation to visit their exhibit in the Manufacturers' Building at the Minnesota state fair grounds. This fair will be held in St. Paul, beginning Sept. 4th. The factory of the company is located at the south end of the Wabasha street bridge, at the entrance to Harriet Island, five minutes' walk from the court house. They will be glad to have their friends in the trade call upon them at this and other times, and promise to do what they can to add to the pleasure of the visit.

O'Halloran & Jacobs, 829 Park building, Pittsburgh, Pa., are quoting especially interesting prices or roofing slate. Besides their well-known Bangor, Bangor Ribbon, Pen Argyl Albion or Jackson, Unfading Washington and Hazel Dell, Unfading Green, Peach Bottom, Sea Green, Intermediate Sea Green and Red, this firm handle other grades such as Brownville, Monson Maine, and Chapman. They also handle a complete line of slaters' supplies, including copper, aluminum, zinc, galvanized, tinned and common slating nails, slate dresser and tools of all kinds, slaters' felt, cement, ridge roll, etc.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

S. L. Boyce & Sons, proprietors of the Big Hardware Store, Port Huron, Mich., evidently are not one of the minority who believe that advertising does not pay. We should judge from their advertisement, presented herewith, that they find advertising extremely profitable. The announcement could hardly be improved upon by the best advertising writer in the country. It is well arranged with an attractive border, and except for small typographical errors and some other slips on the part of the printer, is a model one for hardware dealers elsewhere in the country. Although we are not acquainted with the Big Hardware Store, we should judge that it is completely

A GOOD BEGINNING

THE NEW YEAR

No reason why you should not start right and make a resolution to buy your hardware and other articles too numerous to mention from the oldest hardware house in the city. We base our reputation on the fact that we have given the people their money's worth for years and we want to become acquainted with you.

TO THE WORKING MEN,

We carry in stock as fine a line of machinists' and carpenters' tools as their is in the city. We also have many tools and implements used by men engagad in various trades

ABOUT THAT SHAVE

Our sale of the Gillette Safety Razor has been unusually large and they are giving the best of satisfaction. After once using you will use no other.

The Big Hardware Store,

S. L. BOYCE & SON.

"warrenized," that up-to-date goods are carried, and that catalogue houses are not much of a menace in that community. Their announcement rings with progress and originality.

An advertisement is arranged and worded to attract the greatest amount of attention, to arouse the curiosity of the reader after the leading words of the advertisment have been noted, and to hold his attention after it has been aroused. The nature of the periodical or the newspaper in which the advertisement is to appear should always be considered before the advertisement is composed. The announcement of E. H. Perry, of Edinburg, Ill., is quite above the average, but we feel that the writer did not consider the reader's standpoint before submitting the copy. This advertisement was located near the bottom of the page of a large newspaper. Inasmuch as a newspaper is published daily, inasmuch as there is invariably more reading matter than the average reader cares to peruse, and inasmuch as most people read a newspaper, especially the bottom sections, when it is extended at full length, it is probable that not more than one-tenth of the readers of the paper in which Mr. Perry's advertisement appeared, more than glanced at his announcement. The type is too small and too much is said in the amount of space allotted to it. The name of the advertiser appears twice, but in neither place is the type large enough. In fact, the writer had to read the advertisement twice in order to dis-

X-Mas Toys, Sleds,

Wagons, Skates, Air Rifles, Wheel Barrows, Trunks,

Tool Chests, Combination Game Boards and Sherlock Holmes, latest game out, 45c., at E. H. PERRY'S.

The best heaters on the market for the money. Cook stoves and ranges. Coal hods, shovels, stove boards, &c. German heaters to order.

The 1904 Washer sold only on 10 day's trial; 19 put on trial in the last 40 days and not a one came back. They are guaranteed to clean clothes in less time, with less labor than any washer on the market. A trial will convince you.

Builders hardware, general hardware, tools of all kinds. Tin roofing and guttering a specialty. Prices right.

All work guaranteed. We have the genuine bent wood churns, also the union churns. Guns, rifles and ammunition. Sporting goods of all kinds. Brushes, paints and Oils. E. H. PERRY, Edinburg, Ill.

cover what the advertiser's name was. The vast amount of reading matter is actually daunting to the busy American.

If Mr. Perry had advertised only the best heaters on the market, or only his 1904 washer, or his genuine bent wood churns, or his guns, rifles and ammunition, and only one of these specialties, he would reach perhaps one-tenth of the total amount of his customers, but he would have reached this one-tenth thoroughly and unquestionably. The impression made on this one-tenth would have been greater when summarized than the impression produced upon the whole number of his customers by this composite announcement.

The advertisement of J. Blumenberg, shown in the accompanying illustration, is a tribute to the printer's art. The border makes the advertisement especially prominent. The type is strong and yet not too large to be read easily. Plenty of "whiting out" has been

JUST RECEIVED A NEW LOT OF

Granite ware, China dishes Pictures etc.

NEW GOODS ARRIVING EVERY DAY,

Prices the Lowest.

Give us a call and be Convinced.

J. Blumenberg

left so that the advertisement is not filled with black letters. Mr. Blumenberg is to be congratulated upon the strong wording of the advertisement and the fact that everything is relevant.

Trade Report.

CHICAGO IRON MARKET.

Comparing the present market with the market of the latter part of 1904 would place the former in an unfavorable light. Nevertheless, more than the average amount of buying is going on and the strong undertone pervading the whole indicates that purchasers of pig iron will be rife and ready during the next month. In nearly all the heavy lines, immense tonnages are being contracted for and the possibilities of catching up on old orders are becoming more and more limited. During the week under review, the local pig iron market was characterized by a rather heavy volume of trade consisting mainly of round lots. The Allis-Chalmers Co. entered an order for ten thousand tons of local and Southern foundry and Southern silveries to be delivered during the first quarter of 1906. A number of malleable and foundry interests in Chicago and Milwaukee bought from one thousand to two thousand tons apiece. Prices on Ohio irons have stiffened considerably, thus strengthening local prices on Northern and Southern irons. Nevertheless, concessions are still offered on the basis of $16.50 for Northern coke foundry No. 2 and $15.65 for Southern coke No. 2, Chicago delivery. These prices are holding for deliveries during the first quarter of 1906, but not for the second. Southern furnaces are offering some iron for August and September deliveries on the basis of $11.75 Birmingham for No. 2 Foundry. They are unanimous, however, in not shading prices on the basis of $12.00 for fourth quarter deliveries. There is somewhat of a scarcity of the softer of Southern irons. This with the car shortage in the South helps to maintain prices on a firm basis.

Perhaps the most interesting development of the week was the conference held by the representatives of the Bessemer Association and the United States Steel Corporation officials concerning the purchase of Bessemer iron for September deliveries. It was announced after the meeting that considerable discussion regarding the prices to be paid had taken place, but it is probable that this difficulty will be smoothed over and approximately fifty thousand tons of pig iron purchased during the closing days of the present month. This meeting strengthened Eastern pig iron markets to a large extent and tended to obviate the slight weakening in prices which characterized some of the Valley furnaces during the first weeks of August.

Despite ominous rumors heard ever and anon regarding the condition of pig iron there is no question regarding the strength of the more finished materials. More of these products has been sold during the last six or eight months than during perhaps any other period of equal length in the history of the respective markets. Rails and track supplies, structural materials, plates, steel bars and billets have sold as perhaps never before. Merchant's steel has also made a record which other markets may well envy.

Almost one hundred and twenty-five thousand tons of standard rails were sold in this market during the last ten days. These orders were mostly for 1905 delivery, but it is expected that the crowded condition of the mills will necessitate the holding over of these orders until next year. The Harriman interests negotiated with the steel corporation for seventy-five thousand tons. Heavy sections in five hundred ton lots, f. o. b. mill, are sold at $28.00.

Prices on bar iron were advanced one dollar a ton by local interests during the last week; 1.65c Chicago is the lowest price now obtainable. The market stood the advance well and a number of large orders were received after the announcement. Specifications from car builders and implement makers are abundant. Premiums are asked on steel bars for prompt delivery and can in most cases be obtained. Next year's requirements are being filled at the rate of 1.66½c. Store trade is active.

PIG IRON.

Rogers, Brown & Co., pig iron merchants, will say in their weekly report:

The last of summer sees general conditions well maintained. Recent business has been excellent in both tonnage and prices. The market is of a most interesting character, and present indications point to a continuance. A number of good sized transactions have been closed for delivery during the balance of this year and the first quarter of next. This, with the smaller business placed for next year's shipment and the nature of current inquiry for 1906 delivery, promises well. This is a feature lately developed, as sellers have not been inclined to meet propositions for 1906 movement until recently. Prices remain without change, and it is only exceptional deals, or those in which off material enters, which call for figures below the quotations of last week. There is a marked scarcity of the higher grades of foundry irons, especially in the South.

It is reported that during July, the Southern furnaces decreased their surplus stocks by about 25,000 tons, and as sales made this month have kept up with the production it does not appear that there will be any addition to stocks in that district during August. Southern production continues heavy, but shipments of iron and steel are moving at a greater rate than the material is being produced, with the result of shrinkage in furnace stocks. A leading interest has sold a large tonnage for delivery during the first half of next year, which is taken as evidence that consumers feel prices will be maintained during that period at least.

Unusual activity continues in certain lines, especially steel bars and rails. After the amount of business which has been placed in latter line during this year, it would seem that the maximum had been reached, but orders continue. The mills in the Pittsburg district are now in such shape as to make impossible the considering of additional business for the rest of the season. Running night and day they may be able to keep up with the orders in hand. There is every prospect of a very strong Bessemer market beginning in early September. The reported probable purchase of Bessemer iron by the Steel Corporation is now judged to be practically assured for early September. If they should purchase half or two-thirds of the Bessemer product now stocked in Valley furnace yards, the result is evident. This purchase might have been made this month but for the fact that prices have been somewhat uncertain and an established figure was desired by them. There are several inquiries for Basis iron in the market, and some good sales are anticipated.

Coke is strong with prices steady, some advance being registered. The demand is brisk and production is being

well maintained, although some difficulty is being experienced in effecting ample movement.

Matthew Addy & Company, iron merchants, will say in their weekly report:

There are elements of great strength underlying the pig iron market. The steel end of the business was never in better shape. All the mills are full of work and the U. S. Corporation, which accumulated Bessemer iron during the spring and summer, is so rapidly cutting down its reserve stock that it is highly probable that it will be forced shortly to go into the open market. This will be a decided help to the northern merchant furnaces. As it is, both North and South the furnaces have well filled order books, and shipments are being made in greater volume than at any previous time this year. In the South there is a noticeable shortage of high grade foundry iron; in fact, the only grades in anything like a fair supply are those for mill work.

Indications of a splendid fall business are steadily increasing. The crops everywhere are going to exceed expectation, and this means that the immediate consuming power of the country will be largely increased. Good crops are always the base of good times in pig iron. The railroads are already feeling the influence of this superabundant crop, and before sixty days have passed they will have trouble in moving the country's freight. Even now in some directions there is a scarcity of cars; this is particularly the case in the coke fields, and a car famine later on in the autumn is well nigh certain.

There has been good buying this week all along the line. Several large consumers have purchased good sized lots, while there has been an unusual number of small orders. Carload lots for immediate shipment are much in evidence. There is also a steadily growing demand for quotations for the first quarter of 1906. Furnaces are rather disinclined to sell for delivery so far ahead, but sellers are accommodating them, asking for this delivery the same prices that are quoted for shipment over the last quarter of the year.

The general feeling in the trade is cheerful and hopeful. Consumers have plenty of business on hand and plenty more in sight. The agricultural implement concerns are especially busy, though every one is so full of work that it is difficult to particularize in this regard.

SHEETS.

John McVoy & Co., Chicago, report as follows:

There is a large buying movement on at the present time on both black and galvanized sheets, and the outlook has improved considerably. The cornice makers are all very busy, and the outlook is very bright for a good fall trade. Raw copper continues to advance, and it would not be surprising to see an advance in sheet copper in the near future. The prices on galvanized sheets have not as yet materially advanced, and the same condition also applies to tin plates, but an advance may occur at any moment.

We quote the following prices for shipment from Chicago in ordinary lots. Large buyers are able to shade these figures somewhat:

Black sheet steel No. 16 gauge, $2.55; No. 18-20 gauge, $2.60; 22-24 gauge, $2.65; No. 26 gauge, $2.70; 27 gauge, $2.75; 28 gauge, $2.85; 29 gauge, $3.05.

Wood's smooth—20 gauge, $2.90; 22-23 gauge, $2.96; 26 gauge, $3.00; 27 gauge, $3.06; 28 gauge, $3.15.

Polished sheet steel—24 gauge, $4.85; 26 gauge, $4.95; 27 gauge, $5.05; 28 gauge, $5.15.

Galvanized sheets, regular sizes, 14-16 gauge, $3.00; 18-20 gauge, $3.10; 22-23 gauge, $3.20; 26 gauge, $3.45; 27 gauge, $3.60; 28 gauge, $3.82½; 29 gauge, $4.30; 30 gauge, $4.75; 36 inches wide on No. 20 and lighter, 20c per 100 lbs. advance. Sheets other than 8-ft. lengths take a slight advance over above figures. On 48-inch wide material, either 96 or 120 long, 16 gauge, $3.90; No. 18 gauge, $4.20; 20 gauge, $4.85.

Corrugated, 2½-inch ptd. No. 28 gauge, $2.15 a square.

Galvanized, $3.25 per square.

Sheet copper, 19c base.

Solder, warranted, 50-50 at 19½c per lb.

CHICAGO HARDWARE MARKET.

The waning summer months have been conspicuous because of the absence of bargains offered by jobbers and the prevalence of bargains offered by retailers. Prices have remained firm for the most part and the general demand on the part of retailers for staple and seasonable goods has been remarkably heavy. Jobbers have shown no disposition to force demand by creating attractive prices. On the other hand dealers have to a great extent striven to transform what is ordinarily considered the dullest period of the year into one characterized by at least normal activity. Judging from the reports of correspondents and individual contributions it is evident that dealers appreciate more than ever before the value of stimulating consumers' demands by price concessions and attractive novelties. The tendency has not been to offer staple articles at a loss but rather to mark down goods which have accumulated during the preceding year. There has also been a marked tendency toward the establishment of a regular bargain counter on which are displayed goods selling at small prices, but which, nevertheless, are entirely new and of a fascinating nature.

The demand for fall goods has been steadily increasing during the last three weeks and is now almost at the acme of its progress. The continuation of favorable crop reports, which have been so characteristic of the last six weeks or two months, has resulted in flooding jobbers with orders. The size of the orders indicates that retailers throughout the country expect a heavy demand from the consumer. A comparison of the 1905 orders with the 1904 orders from the same dealers shows that in most cases dealers are apparently expecting a heavier volume of business than last year.

Taking up individual products the evidence is sufficient to warrant the belief that almost without exception there is a strengthened tone in all of them. Those markets which have heretofore been strong continue to manifest the same degree of strength; those markets which have heretofore been weak can either be classed with the strong markets or exhibit symptoms of increasing firmness.

Wire nails and other wire products had brought official prices with the greatest of difficulty up to a few weeks ago, but the demand has improved since that time and reports from all sections of the country indicate a bright outlook for fall business. The wire manufacturers held a meeting at Cincinnati on Tuesday last and existing prices were reaffirmed. Production is being curtailed at the present time, and it was decided to continue this policy. It was found at the meeting that prices could not be successfully advanced. It is probable that there will be no official advance in schedule rates for perhaps one or two months. The demand for cut nails has not been heavy for some time. It is growing, however, and there is every reason to believe that an advance in prices will occur before many weeks.

Other articles, including glass, piping, conductor pipe and eaves trough, oils, black and galvanized sheets, show a marked firmness, and advances in prices may soon be expected.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box
IC	14x14	$10 50
IC	14x20	7 15
IX	14x20	8 40
IXX	14x20	9 60
IXXX	14x20	11 85
IXXXX	14x20	13 10
IC	20x28	14 50
IX	20x28	16 50
IXX	20x28	18 95
IXXX	20x28	21 35
IXXXX	20x28	23 75

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$9 00
Cokes, 200 lbs	IC	20x28	9 35
Cokes, 216 lbs	IC	20x28	9 75
Cokes, 216 lbs	IX	20x28	11 70

PIG IRON.

Lake Sup. Charcoal	$17 50@$17 75
North'n Coke Fdy., No. 1	17 00@ 17 25
North'n Coke Fdy., No. 2	16 50@ 16 75
North'n Coke Fdy., No. 3	16 00@ 16 25
Northern Scotch, No. 1	17 00@ 17 25
Ohio Strong Softeners, No. 1	17 30
Ohio Strong Softeners, No. 2	17 80
Southern Silvery, 4 to 6 per cent Silicon	16 65@ 17 65
Southern Coke, No. 1	16 15
Southern Coke, No. 2	15 65
Southern Coke, No. 3	15 15
Southern Coke, No. 4	14 90
Southern Coke, No. 1, Soft	16 15
Southern Coke, No. 2, Soft	15 65
Southern Gray Forge	14 65
Southern Mottled and White	14 40
Malleable Bessemer	16 00@ 16 75
Jackson Co. & Ky. Silvery 8% Silicon	19 80@ 20 30
Jackson Co. & Ky. Silvery 10% Silicon	19 80@ 20 30
Alabama and Georgia Car Wheel	20 15
Basic Iron	15 65@ 16 15

BLACK SHEET STEEL.

No. 16	per 100 lbs. $2 55
No. 18-20	per 100 lbs. 2 60
No. 22-24	per 100 lbs. 2 65
No. 25-26	per 100 lbs. 2 70
No. 27	per 100 lbs. 2 75
No. 28	per 100 lbs. 2 85
No. 29	per 100 lbs. 3 05

POLISHED SHEET STEEL.

No. 24	per 100 lbs. $4 60
No. 26	per 100 lbs. 4 70
No. 27	per 100 lbs. 4 80
No. 28	per 100 lbs. 4 90

SMOOTH STEEL.

Wood's Smooth, No. 20	$2 90
" " No. 22-24	2 95
" " No. 25-26	3 00
" " No. 27	3 05
" " No. 28	3 15

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel	"A" $10 20, "B" $9 20
Dickey Planished Sheet Steel	8½c

GALVANIZED IRON.

Regular Sizes.

No. 16, per 100 lbs	$3 20
Nos. 18 & 20, per 100 lbs	3 35
Nos. 22 & 24, per 100 lbs	3 50
No. 26, per 100 lbs	3 70
No. 27, per 100 lbs	3 90
No. 28, per 100 lbs	4 10
No. 30, per 100 lbs	5 00
Nos. 22 & 24 x 36 in., per 100 lbs	3 70
No. 26 x 36 in., per 100 lbs	3 90
No. 27 x 36 in., per 100 lbs	4 10
No. 28 x 36 in., per 100 lbs	4 30

SOLDER.

XXX Guaranteed ½ & ½	per lb. 20½c
Commercial ½ & ½	per lb. 19c
No. 1 Plumbers	17½c

SHEET ZINC.

600 lb. Casks	case, per cwt. $7 90
300 lb. Casks	per cwt. 7 95
Sheets	per cwt. 7 70

COPPER.

Copper	base, 21c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits, pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@$4 62½
Bar	6½c
National (White) brands (in less than 100 lb. lots), per lb	7½c

Sheet.

Full coils	per 100 lbs. $7 00
Cut coils	per 100 lbs. 7 25

HARDWARE.

ADZES.

Carpenters'.

Ajax	35&15%
Blood's	40&2½%

Coopers'.

Barton's	20%
White's	15%

Ship.

Ajax	33⅓%
Blood's	37½%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L. Waterproof, 1-10s	40c
G. D.	35c
Eley's	52c

Cartridges.

Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol and Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&8%
Peters Blank Ctgs. 22 cal	$1 24
Peters Blank Ctgs. 32 cal. C. F.	4 60
Peters BB Caps, Round ball	1 50
Peters BB Caps, Conical ball	1 95
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%

Primers.

Berdan Primers	$1 00
Peters Primers	20%
Winchester Primers	20%

Shells.

Peters Empty Paper Shells, 10 and 12 gauge. League	25&2%
Peters Empty Paper Shells, 16 gauge. League	20&2%
Ideal Empty	25&7%
Peters Target and High Gun Smokeless	40&8%
Peters Premier and Ideal Smokeless	40, 10, & 10%
Peters Loaded Shells, League	40%
Peters Referee Semi-Smokeless	40&2½%
Winchester Blue Rivals	33⅓ &
Winchester Yellow Rivals	11%
Winchester Repeater	40&5%
Winchester Leader	40-10&10%
Winchester Loaded Shells, Black Powder	33⅓ & 11%

Gun Wads—per 1,000.

Peters Gun Wads	18%

Powder.

		Each
King's Smokeless, kegs		$11 30
" "	½ kegs	5 80
" "	¼ kegs	2 97
" "	1-lb. cans	51
" "	1-lb. " rifle	70
Dupont's "	50-lb. drum	22 45
" "	25-lb. kegs	11 35
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs	2 97
" "	1-lb. cans	51

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	$1 65
Drop shot, B and larger sizes, 25-lb. bags, per bag	1 90
Buck Shot, 25-lb. bags, per bag	1 90
Chilled Shot, 25-lb. bags, "	1 90

ANCHORS.

Expansion Screw Anchors	10%

ANVILS.

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper	33⅓%

AUGERS.

Boring Machine	60&10&5%
Irwin's	40&10%
Carpenters' Nut	60&10&5%
Hollow.	
Bonney's—list $30.00	75&5%
Stearn's, No. 3 "	33 50
Post Hole.	
Digwell, 8-inch per doz.	12 50
Iwan's Post Hole and Well	40&5%
Iwan's Vaughan pattern, 4 to 9-in., per doz.	6 00
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or without screw	40-5%
Snell's, " " "	40-5%

AWLS.

Brad.	
Handled per doz.	$0 28
Shouldered, assorted, 1 to 4, per gro.	95
Patent asst'd, 1 to 4 "	90
Harness.	
Common "	1 10
Patent "	90
Peg.	
Shouldered "	95
Patent "	40
Scratch.	
No. 2, handled "	4 80
No. 1, socket handled per doz.	1 15
No. 20 Hurwood "	2 00
Sewing.	
Common per gro.	90
Patent "	90

AXES.

Boy's Handled.	
Camp Fire, 3 lb per doz.	$6 25
" " 4 lb., freighters', per doz.	7 85
Cast Steel, good grade, "	6 25
Pioneer "	6 75
Broad.	
Peerless	40-10&5%
Red Warrior per doz.	$22 50
Firemen's (handled) "	13 00
Single Bitted (handled).	
Gladstone, 3 to 4 lbs., per doz.	$10 75
Hunt's " " "	9 00
Lippincott's " " "	9 00
Mann's " " "	9 00
Pioneer " " "	9 75
Valley Forge " " "	9 00
Maricopa " " "	7 50
Single Bitted (without handles).	
Gladstone, per doz. 3 to 4 lbs.	$8 50
Hunt's " "	7 00
Lippincott's " "	6 75
Mann's " "	9 50
Pioneer " "	9 50
Valley Forge " "	6 75
Maricopa " "	6 00
Double Bitted (without handles).	
Lippincott's, 3 to 4 lbs. per doz.	$9 25
Mann's " "	9 50
Pioneer "	9 25
Valley Forge " "	9 25

The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$3.00	4.50	5.50	6.00

BALANCES, SPRING.

Frary's	50%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point cwt.	$2 95

BASKETS.

Clothes.	
Small Willow per doz.	$5 75
Medium " "	6 50
Large " "	7 25

Galvanized Iron.	½ bu.	1 bu.	1½ bu.
Per doz.	$4 00	5 50	7 00

BEATERS.

Carpet.	
Rattan per doz.	$2 40
Raymond's Steel Wire "	80
Woven Wire, No. 4 "	1 10

Egg.	Per dcz.
No. 60 Imp. Dover	$0 60
No. 75 " "	65
No. 100 " "	75
No. 102 " " tinned	85
No. 150 " " hotel	1 50
No. 152 " " hotel tin'd.	1 75
No. 200 " "	80
No. 202 " " tinned	90
	Each
No. 300 " " mammoth.	2 50

BELLOWS.

Blacksmiths'	70%
Hand.	
8 inch per doz.	$6 85
10 inch "	8 40
Molders'.	
13 inch "	13 00

BELLS.

Call.	
2½ in. nickeled bell per doz.	$1 85
2½ in. " brass bell "	3 60
3 in. " " " "	7 50
3 in. " silver alloy bell per doz.	17 00
4½ in. nickeled brass bell and base per doz.	14 50
Cow.	
Ordinary Goods	70&5%
High Grade	60&10%
Jersey	70&10%
Door.	
Bigelow Automatic per doz.	$0 50
Rotary.	
3 in. bronzed iron bell "	5 25
3 in. nickeled " " "	7 50
3½ in. " " " "	9 00
Hand.	
Hand Bells, polished	60@60&10%
White Metal	50%
Nickel Plated	40%
Swiss	60&5%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	70, 10&5%
Farm, lbs. 40 50 75 100	
Each $1.10 1.30 1.85 2.65	

BEVELS, TEE.

Stanley's, rosewood handle, new list	40&5%
Stanley's iron handle	40&5%

BINDING, OILCLOTH.

Zinc	75&10%
Brass	72½%
Brass Plated	75&10%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Ford's	40&5%
Ford's Ship	40&5%
Irwin	50&5%
New Jenning's	50, 10&10%
Russell Jenning's	25&10%
Clark's Expansive	60%
Steer's " Small list, $22.00	30%
" " Large " $26.00	30%
Irwin Car	45%
Snell's Car	60&5%
" Ship	40&5%
Ford's " Auger pattern Car	40&5%
Center	40&10%
Countersink.	
Wheeler's per doz.	$1 30
American Snail head. "	70
" Rose " "	80
" Flat "	70
Buck Bros.' Flat "	2 65
German "	70
Dowel.	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	50&5@50&10%
German Pattern per doz.	$0 48
Gouge "	80
Spoon "	80
Countersink "	1 30
Reamer.	
Buck Bros.' ½ Round "	2 75
" " Square "	2 50
Standard ½ Round "	75
" Square "	75
German Octagon "	75
Screw Driver.	
Round Shank "	56

Round Shank, extra..
quality ..... " 1 40
Square Shank ..... " 1 10

BLACKING, STOVE. (See Polish)

BLADES, SAW.

Butchers'.
Standard ⅞ & 1⅛ in.....60&5%
Clock Spring.....60&5%
Star 15%

Hack.
Disston's .....25&5%
Griffin's.....35&5%
Star 15%

Wood.
Jackson's .....per doz. $2 25
Disston's—No. 6, 16, 20 & 045.. 4 25
No. 11 ..... 6 40
W. M. & Co.'s No. 20..per doz. 5 50

BLOCKS.

Snatch.
Wooden .....55&10%
Steel .....40&10%

Tackle.
Wooden .....70&5%
Steel .....50, 10&5%

BOARDS.

Stove.....40%

Wash.
Globe .....per doz. $2 55
Banner..... " 2 90
Crystal Glass..... " 3 40
Brass King..... " 3 40
Nickel Plate ..... " 3 40
Enamel King..... " 3 40

BOBS, PLUMB.

Carpenters'.
8½ oz. iron.....per doz. $0 65
1½ ℔. " ..... " 1 60
2½ ℔. " ..... " 1 80
13 oz. lead ..... " 3 00
6½ oz. brass..... " 3 30

BOLTS.

Carriage, Machine, Etc.
Carriage ⅞x6 and sizes smaller and shorter.....75&5%
Carriage, sizes larger and longer than ⅞x6 .....70&5%
Machine, ⅞x4 and sizes smaller and shorter.....75&5%
Machine, sizes larger and longer than ⅞x12.....70&5%
Machine, longer and larger than ⅞x12.....70%
Elevator.....50-10&5%
Plow.....60&10%
Stove .....80&10%
Tire .....75&10%
Wagon Box Strap .....70&10%

Mortise Door.
Gem.....50&10%
Ives'.....50&10%

Barrel.
Cast 50%
Wrought .....50&5%
" Bronzed.....75&5%

Flush.
Wrought, B K .....40&5%

Spring.
Wrought .....75&10%
" Brass .....75&10%

Square.
Cast.....40%
Wrought .....60-10&10%

Tire.....72&4%

BORERS.

Angular.
Miller's Falls.. .... per doz. $13 75

Bung.
Common ring with handle.
Inches..... 1½ 1¾ 2
Per doz.....$6.25 7.25 8.50

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2 00 each..25, 10 & 2½%

BOXES.

Mail, No.... ..... 5 10 20
Per doz..... $3.50 10.50 13.00

Miter.
New Langdon.....15&5%
Olmsted's 10%
Stanley's.....30%
Seavey's .....each $1 30

BRACES.

Barber's .....50&10&10@60&10%
Fray's Genuine Spofford's 60%
..Fray's No. 70 to 120, 81 to 123, 207 to 414.....60%
C. E. Jennings & Co.....50&5%
Mayhew's Ratchet 60%
Mayhew's Quick Action Hay Pat. 50%
Miller's Falls Drill Braces.....25%

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1 per doz. $9 75
" No. 2 " 10 50

Shelf.
Cast Iron, Japanned.....50, 10, 5%
Stanley's Wrought Steel 70-10&2½%
Wire .....80, 10&5%

BROILERS.

Wire..... .....70&10%
Crown, Self-Basting, No. 80. doz. $2 16

BUCKETS.

Pump Rubber.
Wychoff.....per gr. $1 75
Cooper..... " 4 75
Champion ..... " 7 50
Victor ..... " 9 25
Star..... " 5 00
IXL ..... " 6 75

Well.
Galv'd Qts..... 10 12 14
Per doz..... $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz 3 75
" " swivel " 4 85
" side-strap, plain " 3 85
" " swivel " 4 95

BUCKS, SAW.

Folding .....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....35-10&5%
Tinners' Iron Burrs only.....70%

BUTTS.

Cast Iron.....65-10&5%
Wrought Brass.....15%
Wrought Steel Bright—Nos. 800, 804, 808, 810, 814 and 834..75-10&10%
Nos. 838, 840 and 842....75-10-10&10%
Nos. 822 and 823.....85-10&7½%
Wrought Steel, Japanned.
Nos. 731 and 727.....70-10-10&10%

CALIPERS.

Double .....60&12½%
Inside and Outside.....60&5%
Wing..... .....60-10&10%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M.....$3 75

Toe.
Shoenberger.....per ℔ 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory Can Stock.
Gallons.... 15 20 30 40
Per set.... $2.85 $3.05 $3.25 $4.40

Milk.
Elgin Pattern.
Nos..... 808 810
Gals 8 10
Per doz..... $22.80 $24.60
New Elgin Pattern.
Eureka Pump, 5 gal.....$9 25
Wood Jacket.....50, 10&10%
Nos..... 105 108 110
Gal. each .. 5 8 10
Per doz.... $15.75 $18.00 $18.75
Iowa Pattern.
Nos..... 608 610
Gal 8 10
Per doz..... $21.00 $22.20
New York Pattern.
Nos..... 908 910
Gal. each..... 8 10
Per doz..... $25.15 $26.95

Oil and Gasoline.
1 Gal. glass, Daisy....per doz. $1 80
1 " cushioned " 3 15
Star, gals..... 1 2 3
Per doz..... $1.45 $2.40 $3.35
Per doz.
Sterling Tilting, 5 gallon.....$ 8 00
"High C" Pump, " 12 00
Eureka Pump " 9 25
Wooden Jacket.....60&10%

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Myers' Imperial.....each $3 50
" Clover Leaf..... " 3 65

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....33⅓%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list. .....60&5%
Philadelphia Plate, new list..65&10%
Martin's..... ..50-10&5%
Payson's.....70&10%
Tucker's, Wood & Iron Wheel.25&5%
" Rubber Weeel.....15%

CATCHERS, GRASS.

Bieder's No. 1.. .....per doz. $5 75
Eureka ..... " 4 25
Ideal No. 4..... " 10 50

CHAIN AND CHAINS.

Breast Chains.
Doubleslack.....doz. pairs $5 75
With Covert snaps. " 5 00
With slide..... " 3 25
Without slide..... " 2 85

Bright Ox Chains.
⅝ in. $7.25; ¾ in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... 5/16 ¼ 3/16 ⅛
Per 100 lbs.. $9.30 $6.50 $5.40 $4.60
Inch..... 7/16 ⅜ ⅜ ¼
Per 100 lbs.. $4.40 $4.30 $4.15 $4.05
Inch..... ½ 1 1¼
Per 100 lbs.. $4.00 $4.00 $4.10

Cable Log Chain.
Advance 35c per 100 lb. on Cable Coil

Cow Tie Chains.
American 2 toggle.....50&5%
" toggle and snap...50&5%
" open & closed ring, 50&5%

Halter Chains.
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list .....40&5
Triumph, " 30%

Picture Chains.
Light Brass, 3 ft.....per doz. 63c
Heavy Brass, 3 ft..... " 75c

Pump Chain.
Galvanized, per 100 lbs.....$5 25

Safety Chain.
Brass.....60&10%

Special Steel Loading Chain.
Inch ..... ½ 9/16 5/16
Per 100 lbs... $16.00 $13.50 $12.50

Stretcher Chains.
5/16 in. $8.50; ⅜ in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's .....70&10%

Trace Chains.
Western Standard.
6½— 6-2..... ...per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 33c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 43c
7 —10-1 ..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch..... ½ 7/16 ⅜
Per 100 lbs... $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c

CHARCOAL

In barrels.....per bu. 22c

CHECKS, DOOR.

Blunt 30%
Blum-Jap'd, $6.25; Brzd., doz....$7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box,
Inches..... 10 12 14
Round, per doz. $2.10 $2.25 $2.75
Flat " 2.85 3.60 4.20

Cold.
Good quality.....per ℔ 10@19c

Socket, Framing and Firmer.
Barton's.....20%
For beveled back, add per doz. .60c

Tanged, Firmer.
With handles, add per doz.....60c

Choppers, Enterprise Meat.
No. 12.....$2 10
No. 22..... 3 40

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each.....$3.90 $4.15 $4.40
Belle, Barrel. 70%
Common Dash, Gal.. 4 5 6
Per doz.....$7.75 $8.50 $10.50
Hero.....70%
Union, Gal..... 5 7 10
Each..... $3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's..... .....30%

Carpenters'
Steel Bar.....25%

Hose.
Sherman's, brass, ¾ in., per doz..33c
Double, brass, ¾ in., " 65c

Saw Filers.
Disston's list, $30.00.....30%
Stearn's, No. 0, $3.50; No. 1, $11.50; No. 3, $5.50 doz.
Wentworth's.....40%

CLAWS, TACK.

Cast, wood hdle.....per doz. 45@60c
Forged steel, wood hdle " $0.80
Solid Steel..... " 1.60
Giant..... " .60

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

Pot.
Wire..... per doz. $0.55

Side-walk.
Steel..... per doz. $3.25
XLCR.....65&5%

CLEAVERS.

Family.
Ajax, In..... 6 7 8
Per doz..... $5.50 $5.75 $6.25

CLEVISES.

Malleable .... per ℔ 3½c

CLIPPERS.

Bolt .....$1.90@$4.75

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 65c
Troy..... " 38c

Hame..... " 20c

CLOTH.

Emery.
Ajax..... 50&10%
B. & A.....50%

Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft..$1 85
9 to 12 " " " " 2 15
2 to 8 " galv. " " 2 70
7 and 8 " " " " 4 25

Screen Wire.
12 mesh, painted, per 100 sq. ft..$1 25
14 " " " " 1 85

COCKS AND FAUCETS.

Compression Plain Bibbs...60-10-2½%
Lever Bibb Cocks.....70%
Compression Hose Bibbs.....60-10%
Telegraph Faucets (new list)...50-5%
Racking Cocks (new list).....70-5%
Compression Lock C'ks(n'w list)..70%
No. 65 Brass Liquor Cocks, doz.. $9.15
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz... $0.85
Milk Can Faucets, per doz...$2.60-4.20
Petroleum Faucets (new list)....70%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin....per gro. $2.00 $2.35 $3.40
Japanned Tin " 3.20 3.45 4.50
Lacquered Brass " 2.55 2.90 4.00

COMBS, CURRY.

Nos 000 20 321 330 417 416
Per doz.$0.32 .80 .90 .95 .80 1.00
Nos 531 533 530 535 545 390
Per doz.$0.96 1.20 1.10 1.85 1.40 1.20

COMPASSES.

Carpen'ers'.....70%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 ℔ .....per ℔ 31c
1½ ℔..... 28c 2 ℔.... " 27c
3 ℔ and larger..... " 25c

CORD.

Pictures.
White Wire .....80-10&5%

Sash.
Baltic Braided Flax.....per ℔ 20c
Silver Lake, white 7-32 in. " 29c
" " " 8-32 in. " 25c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular..... 50%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&10%

COUNTERSINK.

Buck Bros. Flat.....per doz. $2 65

COUPLINGS, HOSE.

Brass.....per doz. $1.00
Brass Plated..... " .85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine...per doz. $22.75

CRAYONS—See Chalk.

CROW BARS.

Pinch or Wedge Point, per 100 lbs. $3.00

CUTTERS.

Glass.
Red Devil 45%
Smith & Hemenway Co 50%
Woodward 40%
Meat.
Enterprise Nos. 5, 10, 12, 22, 32 and 42 ..... 25%
No. 100, list, $18.00 ..... 40&10%
Nos. 2 and 4 ..... 25%
Universal... Nos. 1 2 3
Per doz $10.50 $12.50 $17.00
Smith & Hemenway Co 25%
Pipe.
Stanwoods... No. 1 2 3
Each $0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout ..... per doz. $9 75
1-knife Slaw ..... " 1 65
2-knife " ..... " 2 25
Washer ..... " 7 75

DAMPERS, STOVE PIPE.

Standard ..... 50&10%
American ..... 45&10%

DIES, STOCKS AND

Discount ..... 40&5%

DIGGERS.

Post Hole.
Acme ..... per doz. $8 75
Atlas ..... " 8 25
Eagle ..... " 5 75
Eureka ..... " 6 25
Hercules ..... " 9 75
Iwan's Split Handle .. " 7 00
Iwan's Perfection ..... " 7 75
Iwan's Hercules pattern " 9 00
Ryan's ..... " 17 00
See also Augers—Post Hole.

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $6 85
1¼ in. " " " 7 50
1¼ in. 3-panel natural pine, fancy ..... per doz. 11 50

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock ..... 60% & 65&5%
Blacksmith's Twist 60%
Breast.
Common ..... each, $2 25
Millers Falls ..... " 2 10
Hand
Goodell's Automatic.
Nos. 01 03 3 20
Per doz .. $7.75 $12.50 $14.25 $11 00
Goodell's Single Gear per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's ..... per doz. $16 50
Bit Stock.
Standard List... 60&5%@60%@10%

DRIVERS, SCREW.

Hurwood ..... 40-10&10%
Standard ..... 65&10%
Ajax ..... 70&5%
Champion 45%
" Pattern ..... 60, 10&5%
Clark's Interchangeable 30%
Edison 60%
Reed's Lightning ..... 45&5%
Goodell's Spiral ..... 50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral ..... 50&10%
Smith & Hemenway Co ..... 40&5%

EAVE TROUGH. GALVANIZED.

Territory. L. C. L.
Eastern ..... 80&5%
Central ..... 75&10&10%
Southern ..... 75&12½%
S. Western ..... 75&5%
Terms, 2% for cash. Factory shipments generally delivered.
See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches 5 6 7
Smooth, per doz. $0.85 $0.90 $1.30
Plan'd " 2.00 2.25 2.85
Corrugated Conductor.
5-inch ..... each 60c; per doz, $7.20
6 " ..... " 70c; " 8.40
75% discount to dealers on 2-inch 3-inch and 4-inch plain, round and round corrugated elbows.
Corrugated Stove.
Inches 5 6 7
Smooth, per doz. $0.85 $0.90 $1.50
Pol'd " 1.50 1.75 2.50
Plan'd " 2.20 2.60 3.20
Four-Piece Store.
Inches 5 6 7
Smooth, per doz. $0.50 $0.52 $0.90
Pol'd " .93 1.05 1.40
Plan'd " 1.45 1.60 2.60

EMERY CLOTH—See Cloth.

EMERY, TURKISH.

Size ..... 5-lb. pkgs. ½ kegs, kegs
No. 60 to 150, per lb. 6½c 4¾c 4½c
Flour ..... " 5½c 3½c 3½c

ENAMEL, IRON.

English, ½-pt. cans ..... per doz. $1 50
Nubian " " ..... " 1 80
Peerless 1 50

EXTRACTORS, PIG.

See Forcips, Pig.

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick ..... 60, 10&5%
Hooks and—
Brass 55%
Iron ..... 65&5%

FASTENERS, STORM SASH

Schroeder's ..... per doz. 1 40
Sensible ..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Black Diamond ..... 70&10%
Disston's ..... 75&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior ..... per doz. $4 75
Whisson's Imp ..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel ..... 70&2½%
Wood, 4 tines, per doz $5.25
Coal, Coke, Cottonseed 40%
Hay.
Diamond, 2 tine ..... 50&10%
" 3 " 60%
" 4 " 40%
Golden Eagle, 3 tine 65%
" " 4 " 70%
Digging ..... 70&10%
Scoop 40%
Header.
Diamond, 3 tine ..... 66⅔&5%
" 4 " ..... 65&10%
Manure.
Diamond, 4 tine ..... 60&10%
Golden Eagle 70%
Ore 40%
Spading.
Diamond ..... 70&10%
Golden Eagle ..... 70, 10&5%

FRAMES.

Hack Saw.
Crown ..... per doz. $6 25
Miller's Falls ..... " 10 20
Star ..... " 2 85

FREEZERS, ICE CREAM.

Arctic.
Qts. 1 2 3 4 6
Each $1.10 1.30 1.50 1.80 2.30
Qts. 8 10 12 15
Each $2.95 3.80 4.50 5.20
White Mountain.
20 qt., New Platform ... each $19 10
25 qt., " " " 22 60
25 qt., Sampson Power . " 43 50
40 qt., " " " 58 25

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s ... 20&10&2½%
Cream Pail.
Fairmont ..... per doz. $3 75
Marking, Mortise, etc. .....
..... 50&10%@50&10&5%
Saw.
Atkin's, single, 55c; dbl. 80c per doz
Wire.
Disston's 25%

GIMLETS.

Discount ..... 35@40%

GLASS, WINDOW.

First two brackets ..... 90&15%
Above " " 55%

GLASSES, LEVEL.

Stanley R. & L. Co. ..... 50&5%

GLUE.

Bulk.
B Amber ..... per lb. 11 c
A White ..... " 13½c
H. S. Amber ..... " 15½c
Liquid.
Eagle 40%
Le Page's—
List "A" 37½%
List "B" 33⅓%
List "C" 25%

GOODS.

Bright Wire ..... 90&20%

GREASE, AXLE.

Wood Boxes.
Diamond ..... per gro. $5 50
Frazer's 9 50
Hub Lightning 5 25
Paragon 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross $9 50
3 lb. per gross 25 00
5 lb. per gross 37 00

GRIDDLES.

Soapstone ..... 40&10%

GRINDSTONES.

Family.
Inches 7 8 9
Per doz $8.25 9.00 10.50
Loose.
Per ton ..... $20 00@$21 00
Mounted.
Ball Bearing 1 2 3
Each $3.15 3.00 2.85
Common Bearing .. 1 2 3
Each $3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS, AWL.

Brad.
Common ..... per doz. $0 19
Peg.
Common ..... " 22
Patent, plain top .... " 47
" leather top... " 52
Sewing.
Common ..... " 22
Patent ..... " 52

HALTERS.

Jute Rope ..... per doz. $0 85
Sisal Rope ..... " 1 85
Web ..... " 1 75
Leather, rope tie ..... " 6 50
" leather tie ..... " 8 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Maydole's ..... 40&10%
Engineers'.
Maydole's ..... 40&10%
Farriers'.
Maydole's ..... 35&5%
Machinists'.
Maydole's ..... 40&10%
Nail.
Ajax ..... per doz. $6 00
Calumet ..... " 3 15
Cast ..... per doz. $1 10@$1 50
Maydole's ..... 30&5%
Vulcan ..... 35&5%
Riveting.
Maydole's ..... 35&5%
Shoe.
Cast ..... per doz. 75c
Tack.
All Iron ..... per doz. $0 35
Pol'd Iron, Hickory hdl. " 53
Mall. Iron, Inlaid ..... " 1 55
Magnetic 1 2 3
Per doz 70c 80c $1.00
Magazine ..... per doz. $4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs ..... 70&10%
5 lbs. and over ..... 75&5%
Masons'.
Single & Double Face ..... 70&10%

HANDLES.

Auger.
Common Assorted ... per doz. $0 38
Peck's Adjustable ... " 2 10
Roger's " ... " 4 25
Ives' " ... per set 1 35
Axe 60%
Chisel.
Hickory, Tanged Firmer, Assorted, 25c; Large, 27c per doz.
Hickory, Socket Firmer, Assorted, 18c; Large, 22c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 38c per doz.
Applewood Socket, Firmer, Assorted ..... per doz. 24c
Coal Pick ..... 50&10%
Drifting Pick ..... 50&10%
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye ..... per doz. 48c
Blacksmiths' ..... per doz. 55c@80c
Machinists' ..... " 45c@70c
Hatchet ..... per doz. 45c
Hay and Manure Fork ..... 40&5%
Hoe and Rake ..... 40&5%
Saw.
Plain ..... per doz. 75c
Varnished ..... " 80c
Screw Driver.
Assorted ..... " 37c
Large ..... " 48c
Shovel and Spade 40%

HANGERS.

Barn Door.
Monarch ..... 60&10%
"Never Jump" Hinge ..... 50&10%
Peerless, Loose Axle ..... 60&10%
Perfection, Roller Bearing .. 70&5%
Phoenix, Roller Bearing ..... 70&5%
Prouty, No. 315 .. per doz. prs. $6 35
Rival ..... " " 3 65
Superb ..... " " 5 50
Safety Flexible . " " 6 35
Wagner's Adjustable ..... 70&10%
Warehouse 60%
Conductor Pipe.
Iwan's Perfection 50%
Eave Trough.
Baker's ..... per gro. $2 35
Imperial 20%
Wire 35%
Parlor Door.
Acme ..... per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard ..... " 3 50
" New Model ..... " 3 10
Le Roy Noiseless ..... " 4 00
Richards' ..... 40-10&5%

HASPS.

Hinge, Wrought ..... 50&5%
With Staples—See Staples.

HATCHETS.

Ajax 35%
Blood's 40%
Cast Claw ..... per doz. $1 20@1 45
Cast Shingling .... " $0 95@1 20
Duffy's Barrel ..... per doz. $18 00
Germantown 40%
Hammond's 40%
Roger's Ideal ..... per doz. $5 25
Underhill's Star Lath ..... 40&10%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1 .... per doz. $ 9 75
" No. 2 .... " 10 50

HINGES.

Blind.
Clark's Gravity ... per doz. sets 80c
Parker's 65%
Shepherd's Noiseless, for Wood casing ..... per doz. 1 05
Gate.
Clark's 1 2 3
Hgs & Ltch .... doz. $2.35 2.60 3.65
Hinges only .... " 1.70 1.90
Latches only ... " .70 .75
Knuckle ..... per doz. prs. $6 00
Leed's ..... " sets 6 75
Superior ..... " prs. 9 50
Spring.
American 20%
Bommer Bros. Ball B'g Floor .. 35%
Bommer Bros. Spring Hinges .. 40%
Chicago ..... 25&5%
Columbia Dbl. Acting .... 40&10&5%
Gem 25%
Ideal Detachable .... per gro. $11.10
Matchless 30%
New Idea ..... per gro. $8.40
Oxford 20%
Wrought Iron.
New Lists .....
Light Strap Hinges ..... 70&5%
Heavy Strap Hinges ..... 75&10%
Light T Hinges ..... 65&5%
Heavy T Hinges ..... 70-10&5%
Extra Heavy T Hinges .... 70-10&5%
Cor. Heavy Strap 80 20-10-10-10-10&5%
Cor. Ex. Heavy T 80-20-10-10-10&5%
Screw Hook and Strap.
6 to 12 in ..... per 100 lbs. $3 65
14 to 20 in ..... " " 3 40
22 to 36 in ..... " " 3 15
Screw Hook and Eye.
⅝ in ..... per 100 lbs. $6 55
½ in ..... " " 7 60
¼ in ..... " " 9 45

HOES.

Garden ..... 70&15%
Grub.
Ajax ..... 60 & 10%
Extra 70%
Hazel ..... per doz. $5 00
Ladies' and Boys' ..... 70&15%
Mortar ..... 75&10%
Planter's Eye 62½%
Weed ..... 75&5%

HOOKS.

And Eyes.
Brass ..... 50&10&5%
Iron ..... 65&10%
Awning ..... per gro. $1 80
Belt.
Brown's ..... 70&5%
Jones' ..... 65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's, per doz. 2 50
(See Goods, Bright Wire.)

Bush.
Common Axe Handle
..... per doz. $7 00@$8 65
Hamilton Pattern.....per doz. 7 35

Chain.
Inch... ¼&5/16 ⅜ 7/16 ½
Per 100 $7.60-8.50 9.75 11.50 12 60

Clothes Line.
Japanned.....per doz. 22c@24c
Galvanized..... " 40c

Coat and Hat.
Cast Iron .....per gro. 72c@$1 50
Gem Wire.....75&10%

Conductor.
Malleable.....50&10%@50&10&5%
Wrought .....40&10%@50%

Corn.
Common, unpolished, per doz. $1 40
" polished.... " 1 80
"Cut Easy"..... " 2 75
Clyde's..... " 2 20

Gate.
See Goods, Bright Wire.

Grass.
Common. Nos..... 2 3 1
Per doz.....$1.75 1.80 1.90
German.....per doz. 1 90
Little Giant..... " 2 90
Wood's..... " 1 30

Hammock.
With Plate.....per doz. 33c
With Screw..... " 33c

Lambreguin, or Drapery, per gro. 21c

Picture .....50%@50&10%

Potato and Manure.....65&15%

Screw.
Brass.....80&20%
(See Goods, Bright Wire.)

Seat Spring.....per lb. 5½c

HOOPS, TUB.

Ever Ready .....per case $1 70

HOSE, GARDEN.

3 ply ¾ in. 35 lb. pressure per ft....5½c
3 " ¾ " 50 " " " 7½c
3 " ½ " 70 " " " 7½c
3 " ¾ " 70 " " " 9c
4 " ½ " 80 " " " 9c
4 " ¾ " 80 " " " ...10½c
6 " ¾ " 125 " " " ...11½c
8 " ¾ " 150 " " " 13c
Cotton ¾ in. 75 lb. pressure per ft. 7c
" ¾ " 150 " " " 9c

HUSKER.

Boss.
Nos..... E A B
Per doz.....$1.85 2.05 2.05
Nos..... P PX
Per gro $5.40 4.50
Nos.....2000 3000
Per gro.....$3.00 6.75
Nos..... 4000 O OX
Per doz.....$1.15 1.85 1.35

Brinkerhoff's.
Per gro.....$14 50

Ideal.
Nos..... 102 101 100
Per doz.....$1.35 2.50 2.75

Johnson's.
Per gro.....$7 75

IRON.

See Metals—First column.

IRONS.

Curling.
Common.....per doz. 33c@48c
Princess .....per doz. $0 65
Yale..... " 84
Oxford ..... " 1 15
Ruby ..... " 1 50
Tourist, Folding..... " 90

Pinking ..... " 70

Plane.
Wood Bench.....20&5%
Stanley R. & L. Co. (new list) 25&5%

Sad.
Charcoal .....per doz. $11 00
Common, Polished, per 100 lb. 3 10
" Nickel plated, " 4 20
Chinese Polishing.....per doz. 7 40
Laundry. No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise...per set 79c
No. 55 J, " ... " 76c
No. 50 T, " ... " 82c
No. 55 T, " ... " 79c
No. 50, Howells.... " 72c
No. 55, " ..... " 69c
Tailors' Sad.....per lb. 4½c
" Geese..... " 4½c

Tuyere.
Single Duck Nest....per doz. $5 25
Double " " ..... " 6 25
Sutton .....each 2 60

JACKS.

Locomotive.....75&5%

Wagon.
Meekers'.....per doz. $11 00
Miller's No. 2..... " 7 75
Winner ..... " 7 75
Smith & Hemenway Co 25%

KETTLES.

Brass.....15%
Caldorn 45%
Copper.....per lb. 27c
Muslin 66⅔%
Sugar .....50&5%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40

Cooper's Hoop.....15%

Corn.
Ajax.....per doz. $2 10

Drawing.
Standard 70%
Adjustable.....15%
Barton's Carpenters'.....10%
" Folding Handle....25&5%

Hay.
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 7 75
Iwan's Sickle Edge..... " 9 50
Iwan's Impv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point " 8 75

Hedge.
Ajax, Heavy.....per doz. $6 25
" Extra Heavy.... " 8 40

Mincing.
Common, Single ..... " 40
" Double ..... " 50
Streeter, 4 Blade..... " 1 30
" 6 Blade..... " 2 0

Putty.
Common..... " 84
Goodell's.....per doz. $1 30@1 80
Russell's..... " 1 75@2 25

KNOBS.

Door.
Mineral .....per doz. $0 72
Porcelain ..... " 83
Jet..... " 83

LADDERS.

Common Long.
Per ft .....9c@14c

Extension.
Per ft 12c

Step.
Common, per ft.....6½c
" with Shelf, add 10c.
I X L, per ft 19c

LANTERNS.

Bull's Eye Police.
3-in. Flash Light.....per doz.$6 00
2¾-in. Regular..... " 4 00
3-in. Regular..... " 5 00

Tubular.
Berger.....40&10&5%

LEADERS, CATTLE.

Nos 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.

Cut.....50&5%

Sizes.
Ex. Quality.....per sq. ft. 20c

LEATHERS, PUMP.

Valve and Plunger 50%

LIFTERS.

Stove Cover.
Japanned .....per gro. $2 65
Coppered..... " 3 65
Devore's..... " 5 50
Zero..... " 4 00

Transom.
Payson's.....70&10%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos..... 15 14 13 12 11
Per doz.....10c 13c 17c 22c 29c
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....26c 31c 36c 42c
Braided in 20-ft. hanks.
Nos..... 0 1 2
Per doz 23c 26c 32c
Masons', in 100-ft. hanks..doz. $1 00

Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. " ..... " 1 10
60-ft. Sisal ..... " 1 50
72-ft. " ..... " 2 10
50-ft. Cotton ..... " 85
50 ft. Braided Cotton. " 95

LINING, STOVE.

In Bricks.....per crate 42c

MACHINES.

Boring.	Without Augers	With Augers
Ajax.....per doz.	$5 25	$6 75
Angular.... "	3 25	4 65
Boss ..... "	4 25	5 75
Upright.... "	2 90	4 35

Leather Riveting.
Chicago, Pomeroy....per doz. $9 75
Excelsior ..... " 2 50
Handy ..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00

Washing.
Boss 1 2 5
Per doz.....$56.20 62.20 68.20
Globe, No. 1 .....per doz. 53 00
O K Rotary..... " 55 50
Round Wayne..... " 26 50
U. S. Steel..... " 60 00
Advance, f.o.b. Chic'go " 24 50

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 6 75
Round Hickory..... " 1.75
" Lignumvitæ .. " 2 85
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 40

Tinners'.
Applewood ..... " 1 70
Hickory..... " 80
Hickory Sheet Iron.. " 1 30

MATS.

Door.
National Rigid.....50, 10&5%
Queen Flexible.....50%

Stove.
Standard Quality...per gross $2 90
Best " (Pure) " 4 00
Wire Covered Asbestos, Ex. Heavy .....per doz. 1 00

MATTOCKS.

Ajax.....60&10%
Extra 70%

MAULS.

Iron. lbs. 10 13 16 18 21
Per doz. $2.95 3.65 4.20 4.60 5.05
Wood face, lbs. 10 11 12
Per doz $4.55 4.90 5.15

Wood Choppers'.
Lake Super'r & Oregon Pat. 70&10%

MEASURES.

	½ pk.	1 pk.	½ bu.
Galvanized, per dz.			$4 25
Japanned... "	$1.40	2.10	2.60

METAL.

Babbitt.
Alm .....per lb. 7½c
Best..... " 13 c
Common, No. 4..... " 6½c
Copper Mixed ..... " 19 c
Tony ..... " 9½c
See Metals—In first column.

MICA.

First Quality.....25%
Second Quality.....35%

MILLS, COFFEE.

Enterprise 25%
Parker.....50%
Arcade 50%

MITRE BOXES.

See boxes.

MOPS.

Erie.....per doz. $3 15

Handled Cotton.
Pounds..... ¾ 1 1¼ 2
Per dozen...$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Ball-Bearing.
Inches..... 15 17 19 21
Each $7.50 8.50 9.50 10.50

Cheap Grades.
Inches..... 12 14 16 18
Each $2.30 2.35 2.35 2.50

Clipper .....50, 10&10%

Girard.
Inches..... 14 16
Each.....$3.25 3.50

Philadelphia.
All Styles Except A & E 60, 10&10%
Style A.....50&10%
Style E, High Wheel..60,10,10&10%
Drevels.....50%
All Day.....Net Price

NAILS.

Cut Steel.....rates, $2 05

Horse Shoe.
Ausable .....45&5%
Capewell 5%
Perfect .....40&5%
Putnam 10-5%
Star 35%

Picture.
Brass Heads .....40&10%
Judd's.....40&10%

Brads.....80, 10&10%

Furniture .....65&10%

Wire.
Small Lots.....$2 05
Carload " 2 00
Cement Coated..... 1 80

NAIL PULLERS.

See Pullers

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized Before Weaving..80&15%
" After Weaving...80&15%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern.....60&10%

End and Diagonal Cutting.
Swedish Side.....55%
Utica Drop Forge & Tool Co...40%

Hoof.
Heller's .....40&5%
V. & B.....40-5%

NOZZLES.

Hose.
Genuine Boston.....per doz. $3 05
Genuine Gem..... " 3 15
Magic..... " 3 15

NUTS, HOT PRESSED.

Square Blank.
In. ½ ⅝ ¾ ⅞ 1 ⅛ 1¼
lb. 9c 6c 4c 3½c 3½c 3½c 3c

Square Tapped.
In. ½ ⅝ ¾ ⅞ 1 ⅛ 1¼
lb. 12c 7½c 5c 4½c 4c

For 5 lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern
Brass and Copper.....35%
Zinc 60%

Engineers'
Cannon.....50%
Tin.....per doz. $2.00@$3.00

Machine.
Ajax.....per doz. $0 80
Copper Plated Steel.. " 1 50
Malleable Iron.....40, 10&5%
Tin.....per doz. 55c@65c

OPENERS.

Box.
Inches..... 10 12 14
Flat .per doz $2.85 3.60 4.15
Round " 2.10 2.25 2.75

Can.
Delmonico.....per doz. $1 20
Never Slip..... " 0 65

Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination .....per doz. $11 50
Economical..... " 4 90
Family..... " 10 50

PADLOCKS.

Standard Wrought .....70, 10&5%
Champion 50%
Eureka.....40, 10&5%
Yale .....60&5%

PAILS.

Cream.
14-qt., without Ga....per doz. $2 65
20-qt., " " .... " 3 25
20-qt., with Gauge.... " 4 00

Sap.
10-qt., Galvanized.....per doz. 1 60
12-qt., " ..... " 1 85

Stock
Galvd. qts. 14 16 18 20
Per doz.....$3.50 3.75 4.50 5.00

Water.
Galvanized, qts 10 12 14
Per doz $1.75 1.95 2.25

Wood.
Cable, 2-Hoop.....per doz. $1 90
" 3-Hoop..... " 2 10
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop..... " 1 50
" 3-Hoop..... " 1 70

PANS.

Dripping.....60&10&5%

Fry.
Common.....60&10&5%
Acme.....66⅔&5%

Roasting.
Brownie.....each 22c@30c
L. & H..... " 45c@63c

PAPER.

Building.
Plain .....per 100 lbs. $1 15
Tarred..... " 1 25
Tarred Felt..... " 1 45
Diamond A, Red Rosin, pr roll 60
Leader, Red Rosin..... " 45

Sand and Emery.
Ajax .....50&10%
B. & A .....50&5%

Wrapping.
Grecian Express.....per lb. 3½c
Rag..... " 2½c

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable ..... " 5 70
White Mountain .... " 4 50

Potato.
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

PICKS.

Adze Eye Ore .....65&5%
Drifting and Poll Picks.....70%
Ajax Railroad.....60&10%
Extra Railroad .....70&5%
Surface.....65&5%

PINCHERS.

Carpenters', wrought iron, pol. steel jaws 30%
Blacksmith's 45%

PINS.

Clothes.
Common.....per gro. $0 14
Hoyt's..... " 31
U. S..... " 70

Picket.
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral ..... " 1 90

PIPE.

Conductor.

Territory.	Nested.	Not Nested
Eastern.....	70&15%	70&10%
Central.....	70&7½%	70&2½%
Southern.....	70&2½%	60&20%
Southwestern..	60&20%	60&10%

Lead.
Full coils.....per lb. 6½c
Cut " ..... " 6½c

Stove.

Acme—In.	5	6	7
Smooth, per jt..	8½c	9½c	10½c
Planished " ..	32 c	33 c	43c
Peerless—Smooth.	7½c	8 c	9½c
Polished	14½c	15½c	18c
Plan'hed	28 c	31 c	35½c
Made-up—In.	5	6	7
Smooth	7½c	8c	9½c

7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's..... " ..27c
7 to 6 in. Planished Tapers.....45c

Wrought Iron Gas Pipe
¼@⅜-in., black.....discount, 60%
⅜@½-in. ..... " 60,10&5%
¾-in. to 6-in.. black... " 70%
7 " 12 " .. " 62½%
¼@⅜ " galvanized " 42%
⅜@½ " " " 50%
¾ " 6 " " 57½%
7 " 12 " " 45%

PLANES.

Siegley Iron Bench.....50&10%

PLANTERS.

Corn.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00

Potato.
Acme.....per doz..$6 25
Challenge..... " ..11 00

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—In.	4½	6	8	10
Per doz.....	$2.60	$3.10	$3.90	$5.20

Button's Pattern.

In.	4½	6	8	10
Per doz.....	$2.35	$2.50	$3.45	$4.40

Cutting.
Bernard's.....30%
Lodi.....40&10&5%
4 Tube, revolving..... " 5.25

End and Diagonal Cutting.
Swedish Side 50%
Utica Drop Forge & Tool Co....40%

Fencing.
Farmers' Choice....per doz ..$8 80
Russell's..... " .. 8 80

Flat and Round Nose.
Bernard's 30%
German 50%
Lodi.....40%
Paragon.....40&10%

Gas—In.	8	10	12
Per doz.....	$3.15	$4.10	$5.00

Tinner's.
Hollow.....
Solid..... each..5½c

PLUMBS AND LEVELS.

Common.....75%@75&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%
Stanley's.

Nos.	00S	0S	2S	3S
Per doz..	$4.65	$5.20	$7.60	$8.65
Nos.	30	25	50	35
Per doz.	$13.25	$17.75	$17.75	$12.35

POINTS.

Drive Well Points.....75&10%

POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'ls " " .80
Nickel pl'td, coil hdl's.. " " .65

POKES—ANIMAL.

Brown's, wr't steel, per doz. $5.00@6.00

POLES—FISHING.

Bamboo.

Ft.	12	18
Per. 100	$2.65	$6.25

POLISH.

Metal.
Pride of the Bar.....$1.60
Putz Cream.

Pts.	1-6	½	1
Per doz.....	$0.80	$1.10	$1.65

Pts.	1	2	4	8
Per doz	$2 75	$4.50	$7.50	$12.50

White Silk half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

Pts.	1-6	½	1	2
Per doz.....	$0.70	$1.35	$2.25	$3.00

Shoe.
M. D. C.....per doz. 36c@50c
F. C. O..... " 40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00
Stove.
Black Eagle, 1 lb cans. pr gr..$15.00
Black Silk—
5 lb. pail..... 80c
Paste, 5 oz. cans....per doz. $0 80
Paste, ½ lb. cans..... " 1 00
Black and Japanned—
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.. " 1 75
Blackene, 1 lb cans....pr gro. 13 00
Black Jack, ¾ lb cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1 qt. per dz, 85@95c
Square, 1½ qt..... " $1 00
Square, 2 qt..... " 1 25
2 qt. Reversible..... " 1 50

POTS, FIRE.

Bernz.....each $3 85
Clayton & Lambert's, ea..$4 75@6 25
Gate City.....each 6 25
Gem..... " 6 75

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....25%
Henis .....per doz. $2 10

PRIMERS.

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $7 50
Henry's Improved..... " 65&10%
Water's Improved..... " 70,10&5%

PULLERS.

Cork.
Daisy.....each $3 40
Phoenix..... " 1 60
Quick and Easy..... " 2 90
Nail.
Giant.....33⅓%
Giant Pattern per doz.....$6 00
Tack—Giant..... " 45
Staple.....50%

PULLEYS.

Awning—Jap'd.....40&5% to 35&5%
Clothes Line.....20&10%
Hay Fork.
Iron Wheel, 5 in.....per doz. $1 85
Wood Wheel, 6 in.... " 1 80
Wood Wheel, 6 in., pass knot..... " 2 25
Hot House—Jap'd .....30&5%
Screw..... " .....30&5%
Side ..... " .....30&5%
Sash.
Clark's..... " 42
Common Sense, 2 in ..per doz $0 26
" Pattern, 2 in.. " 22
Empire..... " 24
Ideal..... " 22

PUMPS.

Pitcher Spout.

Nos.	1	2	3	4
Each	$.90	1.00	1.10	1.40

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

PUNCHES.

Conductors'.
No. 22.....per doz. $2 40
Machine.....per lb. 19
Saddlers'.
Common.....per doz. 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 35
Commercial..... "

RAIL.

Barn Door.
Light Wrought.....per ft. 2½c
Safety..... " 4½c
Single Flange ..... " 1½c
Smith's Wro't Bracket, plain 3½c
Smith's Special 4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel 30%
Smith's Milled Steel 4½c
Sliding Door.
Painted iron.....per ft. 4½c
Bronzed wrought iron... " 8½c

RAKES.

Coal or Wood.....per doz. $5.60
Garden.
Steel, braced.....80&10%
Steel, bow.....70c
Malleable Iron, heavy.....70&10&5
Hay.
Wood.....$1.40@$2 00
Lawn—Wood.
Common.....per doz. 2 35
Automatic ..... " 5 75
Gibbs'..... " 3 70
Jumbo, 36 teeth..... " 6 30

RASPS—See Files.

RAZORS.

Bo-ras-ic 50%
Red Devil.....50%

REGISTERS.

List December 5, 1904.

Black and White Japanned...70&10%
Nickel Plated.....70&10%
Electroplated, Brass, Bronze or Copper.....70&10%

RINGS

Bull.

Copper.....	2-in.	2½ in	3 in.
Per doz.....		$1.20	$1.60
Rea's Impro'd Self Piercing copper, pr d'z.	$1.25	1.65	1.75
Steel per doz..		.95	1.05
Nickel Plated		1.35	...

and Ringers—Hog.
Blair's Rings.....per doz. $0 60
Blair's Ringers..... " 85
Brown's Rings..... " 65
Brown's Ringers..... " 90
Champion Ringers... " 1 70
Hill's Ringers..... " 65
Hill's Ring, boxes..... " 45
Major Rings ..... " 80
Perfect Ringers..... " 95
Wolverine Rings..... " 1 50
Wolverine Ringers... " 70
Fruit Jar.
White.....per lb 30c
Key.
Split, round.....per doz. 17c
Split, square..... " 32c
Ball, Round..... " 32c

RIVETS.

and Burrs.
Copper Belt .....50&5%
Coppered Iron 75%
Tinners' .....68⅓@10%
Hame .....per lb. $0 00
Slotted Clinch.....per doz. 40c@45c
Tubular.
Nos. 1 and 2 assorted sizes, doz. 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
¼, 5-16-in. Com. on reels..per lb. 12½c
¼, 5-16-in. Com. in coils .. " 13c
¼, 5-16 Imperial in coils . " 22c
Sewall & Day Sisal Rope.
Rates.....10½c
Sisal.
Eagle, rates.....per lb. 8½c
Pure Manila.
Rates..... " 12½c

RULES.

Boxwood.....60%
Ivory .....35&5%

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's .....25&7½%
Jackson's.....25&7½%
Butchers'.
Disston's..... .. 35&7½%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz. $1.35@$1.60
Disston's.....25&7½%
Cross-Cut.
Atkins'.....35%
Disston's..... 40&10% &50%
Pocahontas Bit.....per ft. 30c
Pocahontas, Blued..... " 41c
Dehorning.
Atkins'.....per doz. $5 50
Disston's..... " 5 75
Hack.
Disston's.....25½%
Keystone.....30%
Hand and Rip.
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120.....25&7½%
Gorham's Comb. .....30&7½%
Keystone.....30&7½%
Sam Sickles', hand....per doz.$4 25
"I Will," hand..... " 5 75
"I Will," rip..... " 6 75
Keyhole—Disston's.....25&7½%
Kitchen.
Sterling.....25%
One Man 50%
Panel.
Brown's.....30&7½%
Disston's No. 7.....30&7½%
Disston's No. D100.....25&2½%
"I Will".....40%
Pruning.
Avery's Duplex.....25&7½%
Brown's.....25&7½%
Disston's.....25&7½%
Wood.
Common.....per doz. $4 50
Handy..... " 7 60
Happy Medium..... " 7 00
Wood Sawyers' Delight " 8 25

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 20
" painted.... " 1 60

SCALES.

Counter.
Pelouze..... .....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½ Bu. "Hercules,"..per doz. $13 75
1 " " " 15 50

SCRAPERS.

Box.
Stanley's Adjustable, per doz.$3 75
Triangular..... " 2 50
Cabinet.
Ajax.....per doz. $2 15
Cast Steel..... " 65c@75c
Stanley's No. 80..... " $11 50
Road.

Cubic ft.	7	5	3
Without runners, ea.	$4.15	3.90	3.65
With runners.... "	4.40	4.15	3.90

SCREWS.

Bench.
Iron ....50&5%
Wood, white maple..per doz. $3 60
Hand—Wood.....20%
Hand Rail.....70&10%
Jack .....75&10&10%
Lag or Coach—all sizes, gimlet pointed .....75&10%
Saw—Centennial.

Nos.	1	2	3	4	5	6
Per doz.	19c	22c	27c	32c	25c	27c

Wood.
F. H. Bright Steel.....87½, 10&10%
R. H. Blued Steel.....85&5%
F. H. Jap'd Steel.....82½&5%
F. H. Brass.....85&5%
R. H. Brass.....80&5%
R. H. Nickel Plated.....75%

SCYTHES.

Clipper, grain.....per doz. $8 15
Clipper, grass..... " 6 36

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 33
Square, " ..... " 42
Octagon " ..... " 33
Square, Buck Bros.. " 1 30
Cup Point, knurled, pr. doz. 70c@$1.20

Rivet.
Farmers'.....per doz. $1 45
Tinners'.....50&10%

Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch... " 6 50
" X Cut..... " 12 00
German ..... " 1 05
Morrill's Old Style... " 5 00
" Pattern.... " 4 25
Leach's..... " 4 80
Nashe's Hand..... " 3 15
" X Cut..... " 4 20
Stillman's Lever..... " 1 30
" X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz. $1 60
Smith & Hemenway.....20%

SHAVES, SPOKE.

Iron.....per doz. $1.35@$2.75
Wood..... " 2.75@ 4.75
Bailey's.....50&5%
Goodell's.....15%
Stanley's Universal.....30&5%

SHEARS.

Pruning.
Buckeye, No. 1.....per doz. $6 75
" No. 2..... " 8 40
California Pat.. 9 in.. " 4 20
" " 10 in.. " 5 00
Draw Cut, No. 3..... " 14 75
" " No. 4..... " 17 50
Henry's Pat. 0 01 14 012
Per doz.....$1.90 $2.50 $3.15 $3.30
Star.....per doz. $4.75

Sheep—No. BBA.
Inches..... 6 6½ 7
Reg. Grip..... $11.25 $11.50 $12.00
Nar. Grip, doz. 11.00 11.25 12.25

Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 $0.42 $0.70

Hatfield's.
Per set..... .75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union..... per doz. $6.75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.
5-inch.....each 28c; per doz. $ 3.30
6 " ..... " 33c; " 3.90
60% discount to dealers on 2-inch, 3-inch and 4-inch plain, round and round corrugated shoes.

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No. 2 Ajax.....per doz. $5 25
No. 4 Golds..... " 6 25
Ames' new list.....Discount 12½%

	Per Doz.
Neverbreak, hollow bck, blk.	$15 75
National.... " " "	14 75
Buckeye.... " " "	10 00
Mohawk.... " " "	9 00

Drain.
Iwan's Perfection.....50%

Railroad, Etc.
Gold Hibbard's.....per doz. $9 25
C. H. Conover's..... " 7 75
Beckwith's..... " 7 75
Hickory..... " 6 25
Greenleaf's..... " 5 75
Columbus..... " 5 00
Ames' new list.....Discount 12½%

Snow.
Per doz.....$1.65@$9.00

Alaska Steel.
D Handle.....per doz. $6 00
Long Handle..... " 5 00

SINKS.

Cast Iron.
Painted..... 50%
Enameled, White.....60-10&5%

Wrought Steel.
Painted, new list.....40 10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....65%
German Pattern.....30&5%
Judd's Pattern.....60&10%@70%

SNATHS.

Double Ring, Bush.....per doz. $6 75
Patent Loop " .... " 7 30
" " Grass..... " 5 75

SNIPS, TINNERS'.

Hernisch's.....40&5%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.

Nos.	1	2	3	4
Per doz.	28c	33c	35c	40c

Reliance.
Per doz.....light $1.45; heavy $2.20

Star.
Per doz..... light 90c; heavy $1.35
Torrey's.....per doz. $1.25
Warner's No..... 11 13
Per doz..... 75c $1.35

SQUARES.

Steel and Iron.....75&5%
(Add for Bluing, $2.50 per doz., net)

Mitre.
Stanley's No. 12.....40%

Try.
Stanley's No. 20, new list...30&10%
" No. 12 and 14.....40%

Try and Bevel.
Stanley's .....40&5%

Try and Miter.
Fox's.....per doz. $6.75
Winterbottom's.....50%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 75
Pearl, nickel plated..... " 1 30
Star, " " ..... " 1 60
Little Giant, tin'd iron. " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated .... " 4 50

STAPLES.

Blind.
Barbed.....per ℔ 9½@9¾c

Butter Tub..... " 8@8½

Fence—less than carload.
Polished.....per 100 ℔ $2 20
Galvanized..... " 2 50

Netting.
Galvanized..... ...per 100 ℔ 3 70

Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....85-10&5%
Extra heavy.....85&5%

STEELYARD.

Discount 25%

STONES.

Axe.
Hindostan.....per ℔ 5½@7c
More Grit..... " 9½c
Washita ..... " 17 c

Emery.....60%@60&5%

Oil—Mounted.
Arkansas Hard.....per doz. $23 00
Arkansas Soft..... " 15 50
Hindostan .....per ℔ 6½@6¾

Oil—Unmounted.
Arkansas Hard.....per ℔ $2 00
Arkansas Soft..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita ..... " 26

Sythe.
Black Diamond.....per gro. $7 75
Clear Grit..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 20
La Moille ..... " 7 00
White Mountain..... " 6 50
Willoughby Lake..... " 6 25
Red End..... " 3 15

STOPS, BENCH.

Hotchkiss'.....per doz. $3 50

STOPPERS, FLUE.

Common.....per doz. $0 32
Crown ..... " 45
Gem, flat, painted..... " 72
Gem, cor'd, decorated.. " 65
Kirch's..... " 90
Peerless..... " 63
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards.

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz. prs. $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50

Wire.
N. S. Elwood's..... " 6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Star Lever..... " 6 25
Star Tackle Block.... " 9 25
Warner's..... " 6 25

SWIVELS.

Malleable Iron.....per ℔ 6½c
Wrought Steel.....per gro. $4 50

TACKS.

American Cut.....90&5%
American Wire.....85&25&10%
Bill Posters Cut.....90&40%
Blued Carpet.....90&15%
Tinned Carpet.....90&10%
Gimp.....90&35%
Upholsters' Cut.....90&40&5%
Upholsters' Wire.....90&35%
Double Pointed.....90&20%
Copper.....per ℔ 32c
Canvas Nails.....75&5%
Clout Nails .....75&5%
Hungarian Nails.....80&5%

TAPES, MEASURING.

Asses' Skin.....35%
Bend Leather.....15%
Patent Leather.....15%
Lufkin's Steel.....25%
Lufkin's Metallic.....25%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&10%
All other kinds.....70%

Cow—See "Chains."

TOOLS, SAW.

Atkins' Dexter.....per doz. $4 50
Atkins' Excelsior..... " 6 50
Disston's Universal.....40%

Minature.
Smith & Hemenway 25%

TRAPS.

Fly.
Balloon..... ...per doz. $1 10
Harper's..... " 1 30

Game.
Newhouse.....50%
New Victor.....75&5%

Mole.
Reddick's.....per doz. $5 60

Mouse and Rat.
Wood Choker.....per hole $0 11
Tin Choker..... " 09
Delusion.....per doz. 85
Imitation Sight, Rat. " 80
Marty Rat..... " 6 75
Marty Rat Imitation.. " 3 75
Marty Mouse..... " 3 15
Marty Mouse Imitation " 2 10
French Automatic.....each 3 60

TROWELS.

Brick.
Standard.....30%
Brade's.....10&5%
Disston's.....30%
Rose's.....20%

Plasterers.
Standard.....33⅓%
Disston's.....30%
W. & McP.....25%

TRUCKS.

Bags.....each $1 70
Handy..... " 1 50
Warehouse.....60&5%

No.	1	2	3
Half Ironed....	$2.65	$3.40	$5.00
Full Ironed....	3.90	5.75	6.75

TUBS, WASH.

				Ex.
Standard.				
Nos.....	3	2	1	large
Per doz....	$4.75	$5.65	$6.50	$ 8.75
Dowell.				
Per doz....	5.00	6.65	7.50	10.00
Cedar.				
Per doz....	6.50	7.50	8.25	11 50
Indurated.				
Per doz....	7.20	7.95	9.45	11.70
Galvanized.				
No.....	1	2	3	
Per doz.....	$5.25	$5.75	$6.50	

TWINE.

	Per ℔
3-ply Cotton Wrapping	19c
4 " " "	19c
4 " " Extra Wrappings	24c
4 " " " Hvy. Wrappings	22c
4 " " Wrapping on tubes	24c
3 " " " " cones	21c
4 " " " " "	21c
India Hemp, ¼-lb. balls	18c
" " ½-lb. "	17c
" " ¾-lb. " .....doz.	65c
2-ply " ¼-lb. "	12c
3-ply " ¼-lb. "	11c
Jute Wrappings, ½-lb. balls	12c
Jute Wool, 1-℔. balls	6c

Seine.

Nos.	6	9	12	15+
Soft, per ℔	24½	22	21	20½
Med. "		22	21	20½
Hard "		23½	22½	22½

Staging, ¼-lb. ball, size 21.....21½c
" " " " 24.....21c
" " " " 27.....21c
Bagging " " 22c
3-ply "B" in hanks.....19c
4 " "B" " 19c
3 " "A" " 29c
3 " Silver Finish, in hanks.....30c

Fodder or Lath.
130-strand 7¾c
200-strand.....8½c

VISES.

Bonney's.....25%
Cheney's 30%
Parker's Oval Slide.....
.....50, 10, 2½ % @ 50 10, 5, 2½ %
Parker's Parallel.....15&20%
Parker's Victor.....10%
Parker's Combination.....65%
Solid Box.....60&5%
Adam's Mechanics'.....each 2 65
Williamson Universal.....40%

WARE.

Cast-Iron Hollow.
Ground.....50&10%
Unground .....60&5%
Extra Finished.....40&10
White Enameled.....40, 10&5%

Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O. G. cast iron...per ℔. 2½c
Wrought iron in bulk per ℔.:

In.	½	⅝	¾	⅞	1	1⅛
	7½c	5½c	4c	3½c	3½c	3½c

Wrought steel in 5 ℔. boxes, per ℔.

In.	½	⅝	¾	⅞	1	1⅛
	8½c	6½c	5c	4½c	4½c	4½c

WASHING MACHINES—See Machines.

WEDGES.

Ax.....per doz....30c
Galling .....per ℔ 10½c
Saw ..... " 8½c

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz ..... 2 50 to 3 25
Standard, per doz..... 2 75
Hoosier, per doz..... 3 10 and 4 15

WEIGHTS.

Hitching ....per ℔ 2½c
Sash—F.O.B. Chicago...pr ton $21 00

WHEEL BARROWS.

Common Railroad....per doz..$15 50
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Favorite Steel Tray.. " .. 25 00
No. 04 Steel Dirt.... " .. 47 00
No. 04½ " " .... " .. 50 00

WHEELs

Corundum .....70&10&5%
Emery .....75&5%

Well	In.	8	10	12	14
Per doz.		$1.90	$2.20	$3.00	$3.50

WIRE.

Barbed	Painted.	Galv'd.
Carloads..per 100 lbs..	$2.15	$2.45
Less than car " ..	2.20	2.50

Brass.
In coils.....30%
In 1 ℔ spools, new list.....50&10%

Broom—Tinned.....60&10&10&10%

Cable—Same price as Barbed Wire.

Copper.
In coils.....30&10%33⅓%
In 1 ℔ spools, new list ... 50&10%

Fence—Smooth.
Nos. 6 to 9, An'cal'd, pr 100 lbs. $1.95
Nos. 6 to 9, Galv'l'd... " 2.25

Hair—New list.....50&10%

Market.
Bright, full bdles.....70&10%
Bright, broken bdles.....70%
Coppered, full bdles 70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....70&5%
Tinned, broken bdles.....65&10%

Picture—In coils.....80%@80&10%
In 5 ℔. spools. .....per ℔..26c

Plain—Small lots..... $2.00
Car lots 1.95

Small spools 5c per hundred higher.

WRENCHES.

Acme Standard.....60%
Alligator .....70&10%
Always Ready.....50%
Bemis & Call No. 2 Improved Pipe Wrenches 60%
Coe's Standard.....40&10%
Girard's Agricultural.....75&50%
Wescott's "S".....33⅓%
Malleable "S".....per ℔. 05½c
Malleable..... " 05½c
Stillson Pipe.....60&5%
Trimo " 60%

WRINGERS.

Clothes.
No. 22, Guarantee....per doz.$31 50
No. 110, Guarantee.... " 31 50
No. 110, Brighton..... " 21 00
No. 22, Pioneer..... " 20 00
No. 2, Superb..... " 19 50
No. 730, Easy..... " 26 00
No. 500, Royal ..... " 30 00
No. 350, Universal.... " 25 50
No. 300, Novelty..... " 25 50
No. 310, Keystone . .. " 25 50
No. 100, Rival ..... " 21 00

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Boynton Furn. Co 12
Brammer, H. F. Mfg. Co 66
Brauer, A. G. 54
Bridgeport Chain Co 1
Bridgeport Crucible Co 52
Brucker, M. 54
Budke Mfg. Co. 21
Burton, W. J. Co 55
Cahoone Co., The 10
Canton Clothes Dryer & Mfg. Co. 62
Canton Steel Roofing Co 56
Canton Fdy. & Mch. Co. 62
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Clark, Quien & Morse 56
Clayton & Lambert Mfg. Co. 60
Columbus Bolt Works 1
Connors, Wm. Paint Mfg. Co 1
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Cope, Geo. W. Pattern Works 53
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Kees, F. D. 68
Keighley Met. Ceil. Co. 56
Keith Furn. Co. 19
Kelsey Heating Co. 13
Kimball Bros. Co 51
Kinne Mfg. Co. 21
Kinsey Mfg. Co. 51
Koons, Wm. U. 17
Kramer Bros. Fdy. Co. 52
Kruse & Dewenter 18
La Crosse Steel Roofing Co 60
Lalance & Crojean 67
Landay Steel Range Co. 6
Lawson Mfg. Co. 57
Lee-Glass-Andreesen Hdw. Co. 71
Lenawee Mfg. Co. 69
Lufkin Rule Co. 64
Mannen & Esterly Co. 17
Manufacturers' Stove Repair Co 54
March-Brownback Stove Co. 16
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Mechanical Metal Mfg. Co 57
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Meyer, F. & Bro. Co. 14
Meyer Furn. Co. 14
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Morris, J. L. Stove Repair Co. 54
Mueller, L. J. Furn. Co. 17-19
Mullins Co., W. H. 62
Munsell, Eugene & Co. 8
National Sheet Metal Roofing Co 57
Newport Sand Bank Co 54
Niagara Machine & Tool Works 55
North Bros. Mfg. Co. 64
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O'Halloran & Jacobs 60
Ohio Stove Pipe & Mfg. Co. 15
Ohio Tool Co. 65
Oneida Community 1
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Peters Cartridge Co. 71
Pittsburgh Stove & Range Co. 2
Portsmouth Stove & Range Co. 7
Powers Bros. 72
Pullman Mfg. Co. 65
Quincy Pattern Co. 53
Reeves Mfg. Co. 21
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Resor & Co., Wm. 6
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Rohrbacher & Allen 14
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Schofield & Co. 51
Schreiber-Conchar Mfg. Co 68
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Security Lightning Rod Co. 61
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Smith, Chas. Co. 20
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Stanley Rule & Level Co. 65
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Stowell Mfg. Co. 57
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Stuber & Kuck 56
Sycamore Wagon Wks 59
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Weller Pattern Co. 53
Wellsburg Heating & Fdy. Co. 15
Wheeling Corrugating Co. 58
Whitacre Mfg. Co., J. E. 59
White Lily Washer Co 63
Willard, Wm. G 8
Williams Stove Lining Co. 54
Winchester Repeating Arms Co. 70
Wise Furn. Co. 14
Youngstown Furn. & Supply Co. 15

CLASSIFIED LIST.

Ammunition
Winchester Repeating Arms Co., New Haven, Conn

Ash Sifters
Hill Dryer Co., Worcester, Mass

Augers—Post Hole
Iwan Bros., Streator, Ill

Bolts
Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Wks., Columbus, O

Brass
Merchant & Evans Co., Philadelphia, Pa

Brooms
Hardin Dustless Broom Mfg. Co., West Liberty, Ia

Cans
Stuber & Kuck, Peoria Ill

Carpenters' Tools
Hurwood Mfg. Co., Bridgeport, Ct
Ohio Tool Co., Columbus, O
Stanley Rule & Level Co., N. Britain, Ct

Cartridges
Peters Cartridge Co., Cincinnati, O
Winchester Repeating Arms Co., New Haven, Conn

Castings
Taylor & Boggis Fdy. Co., Cleveland, O

Ceiling Machinery
Canton Fdy. & Mch. Co., Canton, O

Ceilings—Metal
Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Steel Roofing Co., Canton, O
Friedley & Voshardt, Chicago, Ill
Illinois Roofing & Supply Co., Chicago, Ill
Kanneberg Roofing & Ceiling Co., Canton, O
Keighley Met. Ceiling Co. Pittsburg, Pa
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Wheeling Corrugat'g Co., Wheeling, W. Va

Cement Tools
Kramer Bros. Fdy. Co., Dayton, O

Chains
Bridgeport Chain Co., Bridgeport, Ct
Oneida Community, Oneida, N.Y

Chimney Tops
Iwan Bros., Streator, Ill
Kramer Bros. Fdy. Co., Dayton, O
Sterling Fdy. Co., Sterling, Ill

Clippers
Hotchkiss, Edward S., Bridgeport, Ct

Clothes Dryers
Canton Clothes Dryer & Mfg. Co., Canton, O
Hill Dryer Co., Worcester, Mass
Mannen & Esterly, Cleveland, O

Coal Hods
Victor Stamping Co., Cleveland, O

Coffee Mills
Arcade Mfg. Co., Freeport, Ill

Conductor Hangers
Berger Bros. Co., Philadelphia, Pa

Conductor Pipe
Berger Bros. Co., Philadelphia, Pa
Berger Mfg. Co., Canton, O
Bostwick Steel Lath Co., Niles, O
Clark, Quien & Morse, Peoria, Ill
Friedley & Voshardt, Chicago, Ill
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Reeves Mfg. Co., Canal Dover, O

Copper
Merchant & Evans Co., Philadelphia, Pa

Corn Cribs
Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices
Berger Mfg. Co., Canton, O
Eller, J. H. & Co., Canton, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Cornice Brakes
Bertsch & Co., Cambridge City, Ind
Dreis & Krump, Chicago, Ill
Niagara Machine & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich

Corrugated Iron
Bostwick Steel Lath Co., Niles, O
Garry Iron & Steel Co., Cleveland, O
Sykes Steel Roofing Co., Chicago, Ill

Cut Offs—Rain Water
Cooney & Geiger, Indianapolis, Ind
La Crosse Steel Roof. Co., La Crosse, Wis

Cutlery
Ohio Tool Co., Columbus, O
Smith & Hemenway, Corp., Ltd. New York

Dampers
Arcade Mfg. Co., Freeport, Ill
Dust, Wm. T. & Co., Detroit, Mich
Howes Co., S. M., Boston, Mass
Sayre Stamping Co., Sayre, O

Dies
Canton Fdy. & Mch. Co., Canton, O
Globe Mch. & Stamp Co., Cleveland, O
Stamping & Tool Co., La Crosse, Wis

Door Hangers
Stowell Mfg. & Fdy. Co., South Milwaukee, Wis

Drain Cleaners
Iwan Bros., Streator, Ill

Drills
North Bros. Mfg Co., Philadelphia, Pa

Drop Presses
Canton Fdy. & Mch. Co., Canton, O

Dust Traps
Davis & Walcott, Atchison, Kan

Eaves Trough
Bostwick Steel Lath Co., Niles, O
Eller, J. H. & Co., Canton, O
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Reeves Mfg. Co., Canal Dover, O
Whitacre Mfg. Co., J. E., Rockford, Ill

Egg Beaters
Taplin Mfg. Co., New Britain, Ct

Elbows—Conductor Pipe
Dieckmann, F., Cincinnati, O
Wheeling Corrugated Co., Wheeling, W. Va.

Electrotypes
St. Louis Electrotype Fdy., St. Louis, Mo

Elevators
Kimball Bros. Co., Council Bluffs, Ia

Enamel Ware
Lalance & Grosjean Mfg. Co., Chicago

Enameling
Michigan Enameling Wks., Kalamazoo, Mich

Fencing
Denning Wire & Fence Co., Cedar Rapids, Ia

Files
Barnett, G. & H. Co., Philadelphia, Pa
Disston Henry & Sons, Philadelphia, Pa

Flue Stoppers
Stuber & Kuck, Peoria, Ill

Forming Rolls
Bertsch & Co., Cambridge City, Ind
Bishop Hdw. Co., Dowagiac, Mich.
Globe Mch. & Stamp. Co., Cleveland, O
Niagara Mch. & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich

Foundry Supplies
Obermayer, S. Co., Cincinnati, O

Fuel—Incandescent
Williams Stove Lining Co., Taunton, Mass

Furnaces—Hot Air
American Furn. Co., St. Louis, Mo
Beckwith, Estate, P. D. Dowagiac, Mich
Bergstrom Stove Co., Neenah, Wis
Bonnot Co., The Canton, O
Boynton Furnace Co., New York, N. Y
Canton Fdy. & Mch. Co., Canton, O
Craig-Reynolds Fdy. Co., Dayton, O
Detroit Heating & Lighting Co., Detroit, Mich
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg. Co. St. Louis
Henry & Scheible Co., Cleveland, O
Keith Furn. Co., Des Moines, Ia
Kelsey Heating Co., Syracuse, N. Y
Kontny, John, Chicago, Ill
Koons, Wm. U., Danville, Ill
Kruse & Dewenter, Indianapolis, Ind
Lennox Furnace Co., Marshalltown, Ia
Mannen & Esterly Co., Cleveland, O
March-Brownback Stove Co., Pottstown, Pa
Meyer Furn. Co., Peoria, Ill
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Pittsburgh Stove & Range Co., Pittsburgh, Pa
Robinson Furn. Co., Chicago, Ill
Rohrbacher & Allen, Akron, O
Schwab & Sons Co., Milwaukee, Wis
Smith, Chas. Co., Chicago, Ill
Wellsburg Heating & Fdy. Co., Wellsburg, W. Va
Wise Furn. Co., Akron, O
Youngstown Furn. & Supply Co., Youngstown, O

Furnace Pipe and Fittings
Farwell, Ozmun, Kirk & Co., St. Paul, Minn
Green Fdy. & Furn. Wks., Des Moines, Ill
Meyer, F. & Bro. Co., Peoria, Ill
Mueller, L. J. Furn. Co., Milwaukee, Wis

Furnace Registers
Forest City Fdy. & Mfg. Co., Cleveland, O

Furnace Repairs
Dust, Wm. T. Co., Detroit, Mich
Morris Stove Repair Co., Chicago, Ill

Furnace Supplies
Walworth Run Fdy. Co., Cleveland, O

Hammers
Franklin Specialty Co., Reading, Pa

Hangers—Trouser
Pullman Mfg. Co., Rochester, N. Y

Hardware Jobbers
Clark, Quien & Morse, Peoria, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha

Hatchets
Franklin Specialty Co., Reading, Pa

Hay Carriers
Stowell Mfg. & Fdy. Co., Milwaukee

Hay Knives
Ely Mfg. Co., Girard, Pa

Heaters—Steam and Hot Water
Boynton Furn. Co., New York
Craig-Reynolds Fdy. Co., Dayton, O
Detroit Heating & Lighting Co., Detroit, Mich
Haynes-Langenberg Mfg. Co., St. Louis
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis

Hinges—Spring
Bommer Bros., Brooklyn, N.Y
Lawson Mfg. Co., Chicago, Ill

Hollow Ware
Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

Hot Water Attachments
Smith Co., Chas., Chicago, Ill

Ice Cream Freezers
North Bros. Mfg. Co., Philadelphia, Pa

Ice Picks
Arcade Mfg. Co., Freeport, Ill
Franklin Specialty Co., Reading, Pa
Hurwood Mfg. Co., Bridgeport, Ct

Kitchen Utensils
Arcade Mfg. Co., Freeport, Ill
Fanner Mfg. Co., Cleveland, O
Tapiln Mfg. Co., New Britain, Ct

Lanterns
Berger Mfg. Co., Canton, O
Hurwood Mfg. Co., Bridgeport, Ct

Levels
Baker-McMillen Co., Akron, O
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., New York, N.Y
Stanley Rule & Level Co., New Britain, Ct

Lightning Rods
Security Lightning Rod Co., Burlington, Wis

Lighting Systems
Detroit Heating & Lighting Co., Detroit, Mich

Locks
Taylor & Boggis Fdy. Co., Cleveland, O

Mail Boxes
Blick-Williams Co., Indianapolis, Ind
Signal Mail Box Co., Joliet, Ill

Meat Choppers
Smith & Hemenway, Corp., Ltd. New York

Metal Lath
Wheeling Corrugated Co., Wheeling, W. Va
Bostwick Steel Lath Co., Niles, O

Metal—Perforated
Harrington & King Perforating Co., Chicago, Ill

Metal Polish
Hoffman, Geo. W., Indianapolis, Ind
Nickel Plate Stove Polish Co., Chicago

Metal Shingles
Burton, W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Philadelphia
Nat'l Sheet Metal Roof. Co., Jersey City

Mica
Brauer, A. G., St. Louis, Mo
Dust, Wm. T Co., Detroit, Mich
Morris Stove Repair Co., Chicago, Ill
Munsell, Eugene & Co., New York, N.Y

Miters
Whitacre Mfg. Co., J. E., Rockford, Ill

Molding Sand.
Newport Sand Bank Co., Newport, Ky

Mops
Ely Mfg. Co., Girard, Pa

Nail Pullers
Smith & Hemenway, Corp., Ltd. New York

Nuts
American Lock Nut Co., Oregon, Ill
Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Works, Columbus O
Garland Nut & Rivet Co., Pittsburgh, Pa.

Oil Cans
Cooney & Geiger, Indianapolis, Ind

Ovens
Evan Stamping & Plating Co., Taunton, Mass

Pails—Milk
Lechner, Fred. W., Wenona, Ill

Paints
Connors, Wm. Paint Mfg. Co., Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J

Pattern Letters
St. Louis Electrotype Fdy., St. Louis

Pencils
Dixon, Jos. Crucible Co., Jersey City, N.J

Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Pianos
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., Columbus, O
Stanley Rule & Level Co., New Britain, Ct

Pliers
Utica Drop Forge & Tool Co., Utica, N.Y

Printing
Blakely, Vern, North Girard, Pa

Pulleys
Grand Rapids Hdw. Co., Grand Rapids, Mich

Pumps
Beckman Bros., Des Moines, Ia
Berger Mfg. Co., Canton, O

Punches
American Lock Nut Co., Oregon, Ill
Bertsch & Co., Cambridge City, Ind
Globe Mch. & Stamp. Co., Cleveland, O
Niagara Mch. & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich
Weiss, H. & Co., New York, N.Y

Rasps
Disston, Henry & Sons., Philadelphia, Pa

Registers
Ferrosteel Co., Cleveland, O
Henry & Scheible Co., Cleveland, O
Mueller, L. J., Furn. Co., Milwaukee, Wis
Schreiber & Conchar Mfg. Co., Dubuque, Ia
Schwab & Sons Co., Milwaukee, Wis
Stowell Mfg. & Fdy. Co., Milwaukee, Wis
Tuttle & Bailey, New York, N.Y
Waterloo Register Co., Waterloo, Ia

Roofing—Asphalt
Asphalt Ready Roofing Co., New York
Stowell Mfg. Co., Jersey City, N.J

Roofing—Iron and Steel
Berger Mfg. Co., Canton, O
Bostwick Steel Lath Co., Niles, O
Burton, W. J. Co., Detroit, Mich
Canton Steel Roofing Co., Canton, O
Cortright Metal Roof. Co., Philadelphia
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Chicago, Ill
Garry Iron & Steel Co., Cleveland, O
Kanneberg Roofing & Ceiling Co., Canton, O
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City
Reeves Mfg. Co., Canal Dover, O
Sykes Steel Roofing Co., Chicago, Ill
Wheeling Corrugat'g Co., Wheeling, W. Va

Roofing Cement
Connors, Wm. Paint Mfg. Co., Troy, N.Y
Garry Iron & Steel Co., Cleveland, O

Roof Paint
Conners, Wm. Paint Mfg. Co. Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J
Garry Iron & Steel Co., Cleveland, O
Stowell Mfg. Co., Jersey City, N.J

Rules
Chapin-Stephens Co., Pine Meadow, Ct
Lufkin Rule Co., Saginaw, Mich
Stanley Rule & Level Co., New Britain, Ct

Sad Irons
Schreiber & Conchar Mfg. Co., Dubuque, Ia

School of Salesmanship
Sheldon School, Chicago

Sash Balances
Pullman Mfg. Co., Rochester, N.Y

Saw Handles
Ely Mfg. Co., Girard, Pa

Saw and Saw Sets
Atkins, E. C. & Co., Indianapolis, Ind
Disston, Henry & Sons, Philadelphia, Pa

Scales
Beckman Bros., Des Moines, Ia
Osgood Scale Co., Binghamton, N.Y

Screen Door Check
Pullman Mfg. Co., Rochester, N.Y

Screen Hinges
Kees, F. D., Beatrice, Neb

Screens—Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Screens—Radiator
Harrington & King Perforating Co. Chicago, Ill

Screws
Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Works, Columbus, O

Screws—Hand
Chapin-Stephens Co., Pine Meadow, Ct
Grand Rapids Hand Screw Co., Grand Rapids, Mich
Ohio Tool Co., Columbus, O

Screw Drivers
Hurwood Mfg. Co., Bridgeport, Ct
North Bros. Mfg. Co., Philadelphia, Pa
Smith & Hemenway, Corp., Ltd. New York

Shears
Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Sheet Metal Specialties
Friedley & Voshardt, Chicago, Ill
Gerock Bros. Mfg. Co., St. Louis, Mo
Kinne Mfg. Co., Minneapolis
Kinsey Mfg. Co., Dayton, O
Mullins Co., W. H., Salem, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Sheets—Black and Galvanized
Berger Mfg. Co., Canton, O
Wheeling Corrugat'g Co., Wheeling, W. Va

Sheets—Planished
Ward-Dickey Steel Co., Indiana Harbor, Ind

Shelf-Brackets
Atlas Mfg. Co., New Haven, Ct

Shovels
Avery Stamping Co., Cleveland, O

Sifters
Stuber & Kuck, Peoria, Ill

Skylights
Badger Steel Roofing Co., La Crosse, Wis

Skylight Gearing
Weiss, H. & Co., New York, N.Y

Slate
Auld & Conger Co., Cleveland, O
Johnson, E. J. & Co., New York, N.Y
O'Halloran & Jacobs, Pittsburgh, Pa

Soldering Furnaces
Clayton & Lambert Mfg. Co., Detroit

Sporting Goods
Enterprise Mfg. Co., Akron, O

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa
Duby & Shinn, New York City, N.Y
Stanley Rule & Level Co., New Britain, Ct

Stampings—Sheet Metal
Globe Machine & Stamping Co., Cleveland, O

Staples
Titchener & Co., Binghamton, N.Y

Steel Lath
Bostwick Steel Lath Co., Niles, O

Stoves and Steel Ranges
Beckwith, P. D. Estate, Dowagiac, Mich
Belleville Stove Wks., Belleville, Ill
Bergstrom Stove Co., Neenah, Wis
Born Steel Range Co., Cleveland, O
Cahoone Co., New York, N.Y
Champion Steel Range Co., Cleveland, O
Chicago Stove Works, Chicago, Ill
Foster Stove Co., Ironton, O
Gem City Stove Co., Dayton, O
Globe Stove & Range Co., Kokomo, Ind
Home Pride Range Co., Marion, Ind
Joliet Stove Works, Joliet, Ill
Landay Steel Range Co., St. Louis
March-Brownback Stove Co., Pottstown, Pa
Pittsburgh Stove & Range Co. Pittsburgh, Pa
Resor & Co., Wm., Cincinnati, O
Toledo Stove & Range Co., Toledo, O
Willard, Wm. G., St. Louis, Mo

Stoves—Gas
Fanner Mfg. Co., Cleveland, O
Pittsburgh Stove & Range Co., Pittsburgh, Pa

Stoves—Oil
Standard Lighting Co., Cleveland, O
Taylor & Boggis Fdy. Co., Cleveland, O

Stove Carriers
Kramer Bros. Fdy. Co., Dayton, O

Stove Casters
Kramer Bros. Fdy. Co., Dayton, O

Stove Cement
Dixon, Jos. Crucible Co., Jersey City, N.J

Stove Clay
Bridgeport Crucible Co., Bridgeport, Ct

Stove Lifters
Kramer Bros. Fdy. Co., Dayton, O

Stove Lining
Williams Stove Lining Co., Tauton, Mass

Stove Mats
Stuber & Kuck, Peoria, Ill

Stove Patterns
Cope Pattern Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N.Y
Weller Pattern Co., Quincy, Ill

Stove Pipe
Budke Mfg. Co., Parkersburgh, W. Va
Kinne Mfg. Co., Minneapolis
Ohio Stove Pipe & Mfg. Co., New Philadelphia, Ohio
Reeves Mfg. Co., Canal Dover, O
Wheeling Corrugat'g Co., Wheeling, W. Va

Stove Pipe Radiators
Rochester Radiator Co., Rochester, N.Y

Stove Pipe Thimbles
Stuber & Kuck, Peoria, Ill

Stove Polish
Black Silk Stove Polish Wks., Sterling, Ill
Nickel Plate Stove Polish Co., Chicago
Silver Leaf Stove Polish Co., Indianapolis, Ind

Stove Repairs
Brauer, A. G., St. Louis, Mo
Brucker, M., Chicago
Dust, Wm. T. Co., Detroit, Mich
Kramer Bros. Fdy. Co., Dayton, O
Manufacturers' Stove Repair Co., Chicago
Morris, Stove Repair Co., Chicago, Ill
Reeves, S. V., Haddonfield, N.J

Stove Trimmings
Fanner Mfg. Co., Cleveland, O

Sugar Kettles
Sperry & Co., Batavia, Ill

Tapes
Lufkin Rule Co., Saginaw, Mich

Thermometers—Oven
Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tinplate
Berger Mfg. Co., Canton, O
Eller, J. H. & Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Garry Iron & Steel Co., Cleveland, O
Illinois Roofing & Supply Co., Chicago, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha
McClure Co., Philadelphia, Pa
Merchant & Evans Co., Philadelphia, Pa
Wheeling Corrugated Co., Wheeling, W. Va.

Tinware
Lalance & Grosjean Mfg. Co., Chicago, Ill
Stuber & Kuck, Peoria, Ill

Toasters
Rulofson Co., A. C., San Francisco

Toilet Paper Holders
Franklin Specialty Co., Reading, Pa

Trowels
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Philadelphia, Pa

Tubs—Galvanized
Wheeling Corrugat'g Co., Wheeling, W. Va

Typewriters
Remington Typewriter Co., Chicago

Ventilators
Badger Steel Roofing Co., La Crosse, Wis
Friedley & Voshardt, Chicago, Ill
Globe Ventilator Co., Troy, N.Y
Mechanical Metal Mfg. Co., Phila, Pa
Merchant & Evans Co., Philadelphia, Pa
Powers Bros., Streator, Ill

Wagons
Sycamore Wagon Works., Sycamore, Ill

Washing Machines
Benbow-Brammer Mfg. Co., St. Louis, Mo
Blackstone Mfg. Co., Jamestown, N.Y
Brammer, H. F. Mfg. Co., Davenport, Ia
Clark, Quien & Morse, Peoria, Ill
Voss Bros. Mfg. Co., Davenport, Ia
White Lily Washer Co., Davenport, Ia

Wire Anchors
Lenawee Mfg. Co., Adrian, Mich

Wire Goods
Denning Wire & Fence Co., Cedar Rapids, Ia
Titchener & Co., Binghamton, N.Y

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

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For Sale—A well established hardware business with tin shop in connection, in a county seat in northern Illinois. Address Otto Jessen, Mt. Carroll, Ill. 8

Wanted—For trade, good half section well improved farm in Jackson county, Minn., for hardware stock, located in northern half of Iowa, or southern Minnesota preferred. Address Box 151, Estherville, Iowa. 8

For Sale or Exchange—For good improved or unimproved land, first-class hardware stocks in eastern Nebraska. Best farming country in the state; this is a snap for any one wishing to go into the business. Address "Succeed," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8

Wanted—A good location for a general repair and tinshop; or buy some tinshop in a good live town or buy a small hardware stock. When writing state sales, plan, etc. Address, S. J. Pelz, Berlin, Wis. 8

Wanted—A stock of general hardware in exchange for Iowa improved land or city property, or for $1,000 cash and security or trade for balance. Address Box 19, Lake Park, Iowa. 6

Wanted—Good opening for energetic Christian business man, thoroughly acquainted with plumbing and tinning as partner in hardware business in Michigan. Address "Good," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 7

For Sale—To close partnership, clean, up-to-date hardware with tin, furnace and plumbing shop. Invoice about $7,000, in one of the best towns in northern Illinois, 50 miles from Chicago; population 3,000; good country, good roads, good schools, good people and good pay. Address "Good Pay," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 7

For Sale or Exchange for Typewriter—Complete set of books, Plumbing, Heating and Ventilating of International Correspondence Schools of Scranton, Pa. Address V. W. Ilten, Cedar Rapids, Iowa. 6

For Sale—Hardware stock and tinshop in the best farming district of South Dakota. Stock will invoice $3,000. Only one small stock in town besides this. Reason for selling, too much to look after and need a rest. Will sell one-half interest to a right down hustler and good man. Are doing a fine business. Address Lock Box 85, Wilmot, Roberts Co., S. D. 7

For Sale—One of the best paying tinshops in Indian Territory; a good place for a live tinner; plenty of work; good reasons for selling. Address E. P. Meigs, Ada, Ind. Ter. 7

For Sale—A part interest in a $4,500 stock of hardware; located in a good community and doing a good business. Address Wright & Fleming, Paw Paw, Ill. 7

For Sale—A clean stock of hardware and agricultural implements; invoice between $2,500 and $3,000; in good town of 1,200 inhabitants in Indiana. Will sell entire stock as I am not able to take care of same. Address "J. A. H.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 6

For Sale—Well established hardware stock with tinshop in connection, in a good growing town within 40 miles of Danville, Ill. A good opening for a tinner and plumber, only one other hardware store in town of 1,300 population. Address "Sale," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 6

TINNER'S TOOLS.

Wanted—A strong set of 30 inch squaring shears. Must be strong and durable. Address Quick & Willis Co., Moline, Ill. 8

For Sale—A complete set of tinners' tools, machinery and staker. All in first-class working order. We will sell at a bargain, as we have two sets. Address Koenig & Dun, Forest Jct., Wis. 8

For Sale—A set of tinners' tools in good condition. Address Otto Jessen, Mt. Carroll, Ill. 8

For Sale—Set of tinner's tools at once. Send for list and price. Address F. E. Taber, Clarion, Iowa. 7

For Sale—Set of tinner's tools, in fair condition; will sell cheap if taken at once; send for list. Address L. J. Beuret, Auburn, Ind. 7

HELP WANTED.

Wanted—Tinner at once. Steady position. State wages. Address C. F. Smith, 223 Main St., DeKalb, Ill. 8

Wanted—First-class tinner and furnace man, who understands wind mill and pump work and good at setting up and operating farm machinery. None but sober men need apply. Write stating wages. Address "Tinshop," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8

Wanted—First-class tinner, permanent position. Married man preferred. Address Charles Skidd, Kenosha, Wis. 8

Wanted—A plumber, tinner and pipe fitter; we want a good all around man, and to such a man give work year around. Answer at once stating wages, experience, etc. Address Chryst & Humphrey, Morrison, Ill. 8

Wanted—Tinner; must understand furnace work. Address Henry C. Wiencke, Glencoe, Ill. 8

Wanted—An all around tinner who can do stove repairing and willing to help in store; steady job. Address Herzog & Spindler, 579 N. Chicago Ave., Chicago. 8

Wanted—Foreman experienced in manufacturing pieced tinware and sheet iron goods; state age, salary expected and experience. Address "Experienced Foreman," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8

Wanted—Traveling salesman calling on the hardware trade to sell two first-class washing machines in the state of Iowa, Illinois, Minnesota, Nebraska and Missouri. Machine is now well introduced; will pay good commission. Address S. McGranahan, 837 E. 15th St., Davenport, Iowa. 8

Wanted—Tinner; must be a first-class general workman; one acquainted with furnace and gutter work. Able to lay out his own work; must be sober and steady. State wages and experience; give references. A steady job for the right man. Address John Black, 159 92d St., South Chicago, Ill. 8

Wanted—At once, a good reliable hardware clerk, who has worked in tinshop and is willing to work either place as needed. State wages, age, and experience. References required. Address G. B. Watrous & Son, Waukegan, Ill. 8

Wanted—A good tinner and plumber; steady job at $2.50 a day for the right man. Address "F.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8

Wanted—At once, an all around tinner and furnace man for our shop at Stronghurst, Ill. Steady job year round to sober, competent man. Address, stating wages wanted, Nichols & Rankin Co., Burlington, Iowa. 8

Wanted—Tinner to do all kinds of jobbing work; good tools, good sleeping room; steady job for a good man. State salary wanted. Address Frank Berryhill, Ardmore, Indian Territory. 8

Wanted—Tinner used to furnace work. Address M. J. Meehan, Elgin, Ill. 7

Wanted—A good hustler to do plumbing, furnace work and general work done in connection with tinshop. A steady job for a reliable man; state wages when writing. Address Lock Box 7, Bloomington, Wis. 7

Wanted—Four salesmen having established trade in the states of Iowa, Michigan, Indiana and New York, and thoroughly experienced in the sale of metal ceilings, eave trough, conductor pipe, steel roofing and tin plate. State past experience and salary wanted. Address "B," care of Box 472, Canton, Ohio. 2t7

Wanted—Cornice makers, tinners and slaters. Messinger & Parks, Aurora, Ill. 6

SITUATIONS WANTED.

Wanted—Steady position as tinner. Any shop except wet basement. I am forty years old, good workman, can draft patterns, draw plans for and estimate on furnace work. Would like to correspond with employer willing to let me work on trial. Address "Minnesotan," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8

Wanted—A position in a hardware and implement store as tinner and all around man. Can do tin work, furnace work, plumbing, steam and hot water heating; can also set up and start any kind of farm machinery, pump and windmills. I am employed but desire to make a change by Sept. 1st or before. Please state full particulars and wages in first letter for a steady job. Can furnish references. Address "Position," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8

Wanted—Position by a young tinner with three years' experience; honest, sober and reliable; first-class references; languages German and English. Address Lock Box 6, Kingston, DeKalb, Ill. 8

Wanted—Position as traveling salesman or in retail hardware store; two years on road, five years in retail hardware. Address "W. H.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8

Wanted—Position as tinner; can do common tin work; prefer to work as second man where there is chance to learn. Salary expected, $30 to $35 per month. Good references, etc. Address Lock Box 315, Alden, Minn. 8

Wanted—Situation by a first-class tinner and plumber with 18 years' experience. Strictly steady and sober and married. Good on dairy work and blow pipe, general jobbing and plumbing. Address "All Around," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 8

Wanted—By a good jobbing tinner, steady employment where I can learn furnace work. A, 390 Ogden Ave., Joliet, Ill. 8

Wanted—Are you looking for a good up-to-date man to manage your business or as traveling salesman? If so, I can fill the bill. Address C. R. H., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 7

Wanted—Position by an experienced range foreman, one who can furnish best of reference, and a good man to take full charge of shop. Am an expert on pattern drafting. Can also lay out patterns for gas ranges. Address "Expert," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 7

SPECIAL NOTICES.

WANTED

Foreman for small factory making Galvanized Tanks, Cornice, Skylights, etc. Address "Foreman," care of AMERICAN ARTISAN. 2t-8

WANTED

Wood Pattern Makers on Stove work. Address "Pattern Maker," care of AMERICAN ARTISAN. u. f. n.

WANTED.

Tinsmith for new town in Assiniboia. Young man who understands hardware. German preferred. Apply with references, stating salary expected, to the Lennox Furnace Co., Marshalltown, Iowa. 2t-7

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An earnest salesman-student tells this personal experience in a letter to The Sheldon School, (1521) The Republic, Chicago.

"When I talk to any of my friends about this Course of study, I say to them: 'Take a look at me for a living example of what it does for a fellow.' Last year at this time I was trying to make a good fellow of myself by taking a drink here or a cigar there and by retailing silly stories unfit for the cultured ear, enjoying but very indifferent health and in every way cultivating the negative qualities in myself.

"Today I am a better fellow than ever but no drinks or cigars for me, thank you; no silly stories; have the best of health, with a disposition to make every moment count for good and for the cultivation of the positive qualities, and last but not least, am **making two dollars where I only made one a year ago.** When I listen now I endeavor to listen to my edification and when I talk I endeavor to talk for the other fellow's enlightenment or to get his dollars and cents."

This candid writer's name may be learned on inquiry. Wouldn't it pay many other salesmen to be transformed 100 per cent? Wouldn't it profit employers to have all their salespeople grow in power? Send for The Sheldon School prospectus and learn how easy it is done.

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WANTED.

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WANTED

Stock of hardware or implements in exchange for a good improved Iowa farm. Address "Nilco," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 4t-6

WANTED

Now, or for 1906, one or two good and experienced salesmen for Missouri and Kansas. Joliet Stove Works, Joliet, Ill., 3t.6

SALESMAN

Wanted—First-Class Stove Salesman, on commission, for up-to-date line Steel Ranges in Ohio, Indiana, Michigan and Western Pennsylvania. Address with full references, Box S. S. care AMERICAN ARTISAN. 4t5

WANTED

"State Salesman" calling upon Department Stores, Mail Order Houses and Jobbing Hardware Trade, on Enamelware and Specialties. Address "Box 3068," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4t-5

FOR SALE

The stock of "The Fort Dodge Plumbing & Heating Co." which we have taken on a bill of sale. This stock consists of about $1,200.00 worth of plumbing and heating goods, tools, safe, horse, wagon and harness, and everything necessary to continue the business. A good location; an excellent opening; reasonable rent, and easy terms to the right party. Here's the chance of a lifetime, "opportunity" knocking at your door. Act quick if you're interested. Population of Fort Dodge 16,000, and only three other shops. LEIGHTON BROS., Fort Dodge, Iowa. 3t-7

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as to use an ordinary Dust Pan, when they can get a "20th Century Dust Pan" for 25c, which requires no stooping, takes up the dust cleaner, and being made of the best Polished Steel, will last longer than ten ordinary Dust Pans. The people want it, and it pays to supply them with what they want.

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Send check with order.

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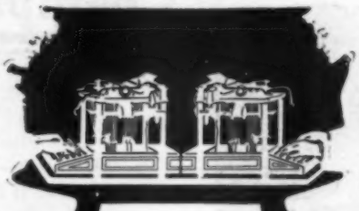

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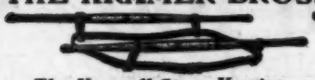

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Black Silk Stove Polish Works,
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Gentlemen—We have handled Black Silk Stove Polish for a number of years. Its sales have been steadily increasing since we made our initial purchase. We attribute this to its high quality and standard merit which appears to have captured the public.

Our customers write us that it is a clean polish to use, as it does not dust off, and that it does not dry out when kept in stock. Truly yours,
Lee-Glass-Andreesen Hardware Co.

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Gentlemen—Our experience with Black Silk Stove Polish has been very satisfactory, it is free from dust and dirt and never dries out.

The only complaint that we can offer at the present time being that we have great trouble in getting enough to fill our orders. Yours very truly,
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IN plumbago get a sample of our No. 702 Pure Ceylon Plumbago, test it—we don't care how severe the test is—it will do all we claim, and more.

SUCCESSFUL foundrymen everywhere use our No. 702. Are you successful?

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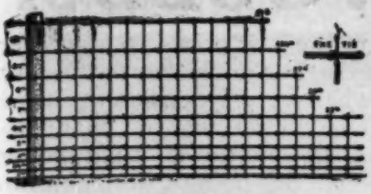

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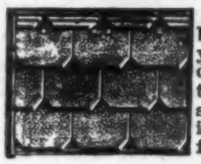

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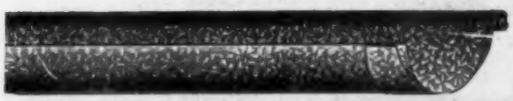
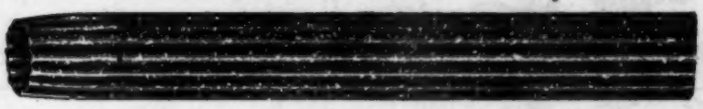
Don't Forget, Mr. Jobber





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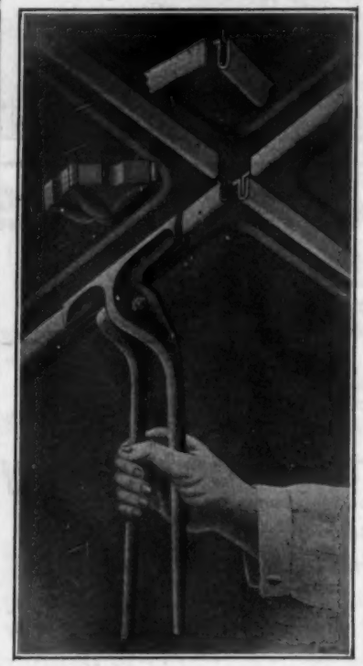


Lock-Joint Metal Ceilings

are easily erected by any mechanic, at a saving of nearly 50% in labor and furring. The edges are formed on the plates and we furnish (without extra charge) the special tongs for tightening the joints. Only 4 nails to the plate. "Absolutely Dust-Proof."

Write for Catalogue D.

S. Keighley Metal Ceiling & Mfg. Co.
Pittsburg, Pa.
WASHINGTON 1335 F St., N.W. BALTIMORE 510 W. Pratt St.

Are making money for hundreds of Tinners. Are you one of them—if not, write us.
Cortright Metal Roofing Co.
Philadelphia Chicago

"Canton" Metal Ceilings are labor savers and patron pleasers. Are best and cheapest "because the construction is right." Classified designs. Ever see our Art Book "G"? It shows the goods.

The Canton Steel Roofing Co.
"The Metal Ceiling Makers."
CANTON, OHIO
N. Y. Agency, No. 157 W. 23d Street

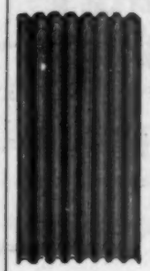
Stay-In Flue Stoppers

Brass finished. Nicely decorated. Cannot be jarred or blown from flue hole. Guaranteed to be soot proof

POT COVERS

All sizes of pot covers, hemmed and ringed, from 9 in. to 13½ in.

STUBER & KUCK, - Peoria, Illinois
Manufacturers of Pieced Tinware and all Styles Flour Sifters.



Freight charges are sometimes heavy charges. We can save you money.

We are large manufacturers — small profits, many sales.

SYKES STEEL ROOFING CO.
Chicago, Ill. and Niles, Ohio.
Mfrs. Steel Roofing, Corrugated Iron, etc.

"Nothing except the mint can make money without advertising."—Gladstone.

PLECKER'S CORRUGATED EXPANDING CONDUCTORS.

Made of Galvanized Iron in Ten-Foot Lengths without a Cross Seam. Will not burst when full of ice

CLARK, QUIEN & MORSE, Peoria, Ill.

The Harrington & King Perforating Co.

PERFORATED METALS

OF EVERY DESCRIPTION, FOR ALL PURPOSES AND FOR SCREENS OF ALL KINDS

·CHICAGO·U·S·A·

212 NORTH UNION ST. CHICAGO.

114 LIBERTY ST. NEW YORK.

MAIN OFFICE & WORKS CHICAGO.

IWAN'S VOLCANO

Revolving and Ventilating CHIMNEY TOP.
Unsurpassed for creating strong regular draft at all times.

IWAN'S PATENT IMPROVED POST HOLE AND WELL AUGER.
Best in the world for fence, telephone and telegraph post holes, wells, plumbing, etc.

PERFECTION WIRE CONDUCTOR PIPE HANGER.
Made of galvanized wire. For frame or brick buildings, holds pipe one inch from building to permit painting.

Sample Hanger Free By Mail

Write your jobber or us for prices on the IWAN SPECIALTIES.

Manufactured only by IWAN BROTHERS, Streator, Ill.

J. H. Eller & Co.

GENUINE CHARCOAL IRON TIN PLATE

METAL CEILINGS

CORNICE SKYLIGHTS METAL SHINGLES VENTILATORS EAVESTROUGH CONDUCTOR PIPE ROOFING & SIDING SOLDER ETC.

CANTON, OHIO.

MATCHLESS FLOOR HINGES

Do *you* care whether you sell high-grade, or cheap Floor Spring Hinges?

No Hinges like MATCHLESS Ball-Bearing Floor Spring Hinges for the Trade that wants the *best*—the *strongest*—the *most durable*—the *most economical*.

Ask Dept. A for catalogue and prices.

LAWSON MFG. CO.
40 Dearborn St., CHICAGO
107 Chambers St., NEW YORK

E. H. TITCHENER & CO.

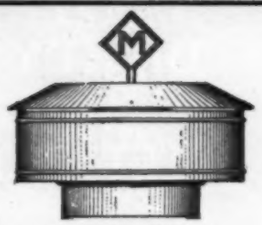
STAPLES AND WIRE SHAPES
IN ALL VARIETIES.
Binghamton, N. Y., and 42 No. Peoria St., Chicago.

PORTABLE ASPHALT ROOFING
THE WORLD'S BEST
Monarch, Felspar, Slag, Asbestos, Cork, Gravel, 1, 2, 3-ply Paints, Cement.
Write for Samples, Prices and Booklet.
Our line brings trade—
Gives universal satisfaction.
STOWELL MFG. CO., JERSEY CITY, N. J.

THE NATIONAL SHEET METAL ROOFING CO.

METAL SHINGLES & TILES
FROM TIN, GALVANIZED TIN AND COPPER.
REQUIRE NO PAINTING OR AFTERCARE
RUST, STORM & FIRE PROOF
LARGEST VARIETY OF STYLES

339-345 GRAND ST.
JERSEY CITY, N. J.



Patent applied for

THE "MECHANICAL" VENTILATOR

TINNERS, CORNICE MEN, ROOFERS, METAL WORKERS, WRITE US FOR

"6 Reasons Why"

YOU SHOULD USE THE "MECHANICAL" VENTILATOR.

MANUFACTURED BY
MECHANICAL METAL MFG. CO.
369 Bourse Building
PHILADELPHIA, PA.

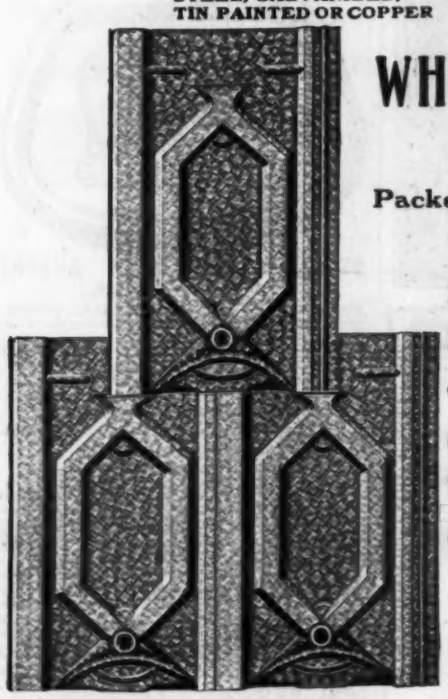
You do not have to paint
Arrow Brand Asphalt Ready Roofing

When laid according to directions it will need no care for many years.

Asphalt Ready Roofing Co., 136 Water St., N. Y.

WE MANUFACTURE DIXIE METAL SHINGLES

STEEL, GALVANIZED, TIN PAINTED OR COPPER **FOR ROOFING OR SIDING**

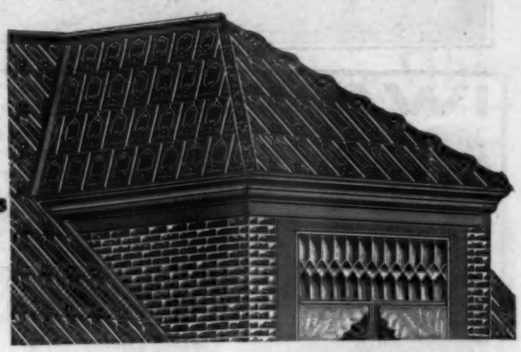


WHEELING CORRUGATING CO.

WHEELING, W. VA.

Packed in boxes containing sufficient quantity to cover one square.

For Roofs, One-Fourth Pitch or More, Gables, Manzards Bay Windows, etc.



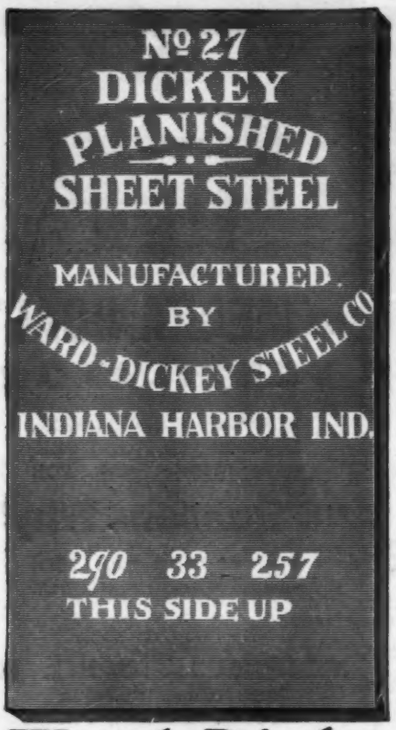
NO MATTER WHAT KIND OF METAL ROOFING YOU WANT, WE MAKE IT—WRITE TO US.

WE SHIP QUICK. LARGE STOCKS IN ALL OUR WAREHOUSES.

DIXIE SHINGLES
Sizes—7x10 in., 10x14 in., 14x20 in.

BRANCH OFFICES AND WAREHOUSES:

New York City - - - 47-51 Cliff Street
Chicago - - - - 45 and 47 Lake Street
St. Louis - 112, 114, 116 South Eighth Street
Philadelphia - 402, 404, 406 Race Street
Boston, Mass. - 132 and 134 Pearl Street
CHATTANOOGA, TENNESSEE



Hammer Planished

Open Hearth steel sheets for Stoves, Ranges, Stove Pipe, Elbows, etc. Soft — Tough — Never Breaks— Takes long and high heats and holds its color. Send for price list. Gauges No. 18 to 28.

Manufactured by

Ward-Dickey Steel Co.

INDIANA HARBOR, IND.

Locations for Industries

Erie Railroad System Chicago to New York

The Erie Railroad System's Industrial Department has all the territory traversed by the railroad districted in relation to resources, markets and advantages for manufacturing, and can advise with manufacturers of specific products as to suitable locations, furnishing them with current information of a comprehensive nature, dealing with the project in its full relation to manufacture and commerce.

The Erie is one of the greatest of trunk lines. Its own rails connect the two largest cities of America.

Every section of the System has its particular merits. It has great general and coal, oil and natural gas resources,

It is important in this age of modern facilities for manufacturers to locate where they can obtain side tracks so as to receive from and ship directly into cars at the factory. Information can be promptly furnished in this connection about every point on the system between Chicago and New York.

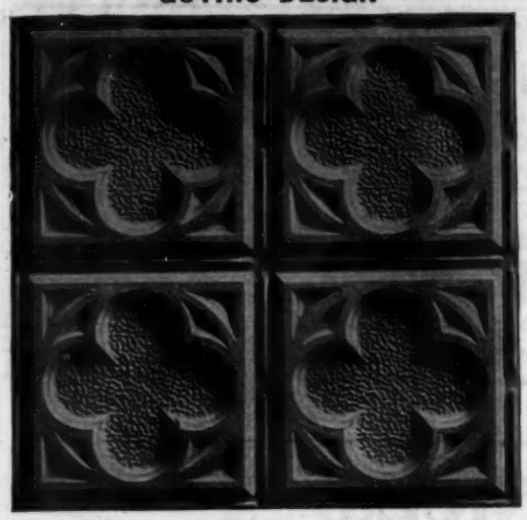
Manufacturers' inquiries as to locations are treated in strict confidence and absolutely reliable information, so as to promote permanent traffic, is furnished. Address

LUIS JACKSON
Industrial Commissioner
Erie Railroad Company
21 Cortlandt Street, New York

Persistence in Advertising

In the expansion of business now bringing profit to so many manufacturers, advertisers who have made themselves regularly prominent in the past five years have been notable in reaping the rewards of persistent publicity.

GOTHIC DESIGN



Art Metal Ceilings

Exclusive and Artistic Designs.
Perfect Fitting Plates.
Dust Proof Joints.

Write for Prices and Catalog "A"

Estimates and Plans furnished free of charge.

Write for 50-page supplement to Catalog "A"

For Architectural Sheet Metal Work, Galvanized and Copper Cornices, Roof Gutters, Curved Mouldings, Skylights, Finials, Ventilators, Metal Shingles, All Styles Roofing and Conductor Pipe, Eaves Trough, Elbows, Shoes, Etc.,

Write for prices and Catalog "B"

Kanneberg Roofing & Ceiling Co.
Manufacturers,
CANTON, OHIO, U S A.

THE

"Big Four Route"

passes through an interesting Country every mile of the way

CHICAGO TO

INDIANAPOLIS
CINCINNATI
LOUISVILLE

and all points

SOUTH
and SOUTHEAST

Buffet Parlor Cars or Dining Cars on day trains, and Pullman's finest Compartment and Standard Sleepers on night trains. All trains run solid, Chicago to Cincinnati. The only line from Chicago connecting in the Central Union Depot, Cincinnati, with C. & O., Q. & C., L. & N. and B. & O. S. W. R'ys. For reservations, etc., call on or address

J. C. TUCKER, G. N. A.
238 Clark St., Chicago.

An Up-to-Date Hardware Delivery Wagon

is what you will need this Fall for delivering your stoves and furnaces. You can handle your goods cheaper, easier and quicker on our low-down short-turn delivery wagons than on any other kind. Body twenty inches from the ground, full width, regular height wheels, and yet wagon will turn as short as any cut-under wagon with a reach.

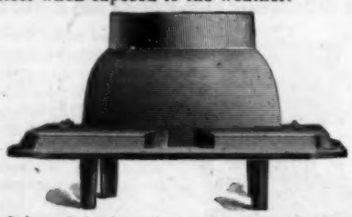
Easy to Load and Light of Draft

No enterprising, economical merchant can afford to buy or use any other wagon. Built upon honor from the best of material and by experienced workmen. We make many styles suitable for all kinds of trade, hardware, furniture, piano, grocery, milk, laundry, bakery, meat. Complete catalog on request. Mention this paper and address in full,

Sycamore Wagon Works
109 Edwards Street **Sycamore, Illinois**

The Best Chimney Cap

This cap as illustrated below is made of cast iron and is designed to replace the old style galvanized sheet iron hood. The Best will last a lifetime, for cast iron will last longer than any other form of iron or steel when exposed to the weather.



It is made in three sizes and the legs are adjustable. The legs project inside the chimney to prevent the cap from blowing off. It is not necessary to use mortar or cement to fasten this cap to the chimney as the legs will keep it in place.

This is a Good Thing. Has Merit. Write for Prices

Put up in half doz. and one-third doz. crates. If your jobber does not handle the Best write to us.

STERLING FOUNDRY COMPANY, STERLING, ILL.

Outside Bead

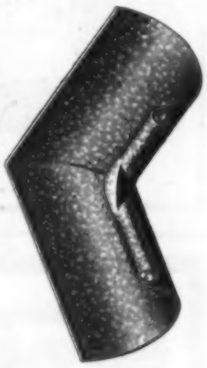
Imitations Are Recommendations

We make the one-piece miter that others are trying to imitate. Made of special galvanized stock, true to size, shape and in all styles, single and double bead, inside or outside turn. No obstruction in slip joint.

Write for information.

Get the original.

J. E. Whitacre Mfg. Co.
ROCKFORD, ILL.



Inside Bead

H. A. Goold, Hiawatha, Kans., writes April 3, 1904: "You may discontinue my ad, as I have had so many answers that I was surprised. Your paper is well worth the subscription price, and I cannot see how any tinner wants to get along without it."

Sheet Metal Architectural Ornaments, Statuary, Etc.

ART METAL CEILINGS

Roofing, Corrugated Iron, Galvanized Iron, Corrugated Conductor Pipe, Finials, Weather Vanes, Cresting, Etc., Sheet Copper.

Galvanized Steel Tanks for all Purposes.

FRIEDLEY & VOSHARDT SEND FOR CATALOGUE A 21 194-202 Mather St., CHICAGO, ILL.

STEEL CEILINGS! DROP A POSTAL FOR New Cat!!

ROOFINGS
SIDINGS
EAVE-TROUGH-CONDUCTOR

CORNICES!

SKYLIGHTS!

QUICK SHIPMENTS!!!

La Crosse Steel Roofing & Corg. Co., La Crosse, Wis.

ROOFING SLATE

SLATE BLACKBOARDS

E. J. JOHNSON & CO.

38 PARK ROW, NEW YORK

Quarries: PENNSYLVANIA AND VERMONT

Prices quoted delivered anywhere. Booklet and complete Price List on application. Wire inquiries given quick attention

O'HALLORAN & JACOBS,

ROOFING SLATE

SLATERS' SUPPLIES.

829-830 Park Building, PITTSBURG, PA.

ROOFING SLATE

All Grades Manufactured and Sold by

THE AULD & CONGER CO.

CLEVELAND, O.

ROOFERS' SUPPLIES, TOOLS, LIGHTNING SLATE DRESSER

WE MINE OUR OWN SLATE

Valves and Plungers

Only the very best leather and rubber are used in these goods and all are carefully and evenly fitted making them the best of their kind.

Berger Bros. Co.

Office and Stores: 237 Arch St.
Warerooms: 100-02-04 Bread St.
Factory: 3114-16-18-20 N. 17th St.

Philadelphia

A Good Substantial, Well Made, Up-to-the-Minute Fire Pot Means a No. 1

$6.00 NET.

It has no equal and is the acknowledged standard of excellence. It costs a trifle more than some, but a careful investigation will convince you if you really have any use for a fire pot that **you could not afford to use anything but the No. 1 if it was given you** as it saves time, gasoline, and has so many advantages not found in other makes. Jobbers sell at factory price. "Your money back if you are not pleased" is our guarantee. Our catalog is free.

CLAYTON & LAMBERT MFG. CO.

DETROIT, MICH., U. S. A.

H. WEISS & CO.

20 CLIFF STREET, NEW YORK.

SKYLIGHT GEARING AND CHAIN LIFTS

TINSMITHS' & PLUMBERS' TOOLS.
CORNICE MAKERS' TOOLS.
COPPERSMITHS' TOOLS.
PIPE THREADING MACHINES.

SECOND-HAND GOODS BOUGHT, SOLD AND EXCHANGED.

The Wolf at the Door

Has he ever knocked at your door, Mr. Dealer, examined your bank-book, and found you wanting? Has he ever threatened? Better keep him at a distance. Don't give him half a chance. Insist upon quick shipments, possible only with houses that carry immense stocks. Insist on the lowest prices, possible only with houses that can afford to make small profits.

GARRY IRON & STEEL CO., CLEVELAND OHIO

Eaves Trough, Conductor Pipe, Gutters, Roofing Paint, Corrugated Iron, Tin and Terne Plates, etc., etc., etc.

BERGER'S GENUINE CHARCOAL IRON

Eave Trough, Conductor Pipe, Roofing, Siding, Tin Plate, Etc., Etc.

Write for Prices or Samples.

Our Prices on Black and Galvanized Sheets and Other Productions Will Interest You. Better write us at once Stating Your Needs.

Use Berger's "Classik" Metal Ceilings. Made for All Kinds of Buildings. Easily put up. Exclusive Design. Catalogue Free.

IT WILL BE TO YOU R ADVANTAGE to SECURE OUR PRESENT LOW PRICES

THE BERGER MFG. CO., CANTON, OHIO

NEW YORK PHILADELPHIA BOSTON ST. LOUIS

Art. 8-26-5

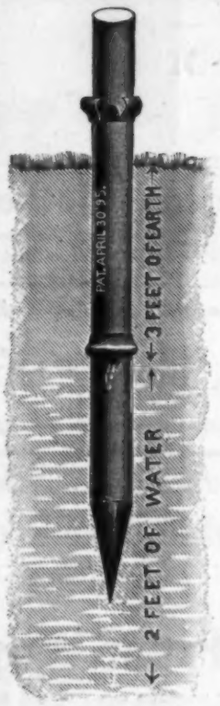
MEDAL AWARDED, WORLD'S FAIR, ST. LOUIS

The O. K. Steel Brake. Patented March 28, 1901

W. J. Burton Co., Detroit, Mich.
H. Weiss & Co., 20 Cliff St., New York, N. Y.
Janney, Semple, Hill & Co., Minneapolis, Minn.
C. Sidney Shepard & Co., St. Louis, Mo., etc.
Illinois Roofing & Supply Co., Chicago, Ill.
J. M. & L. A. Osborne Co., Cleveland, O.
Laskey Rogers Co., Toledo, O.
Holbrook, Merrill & Stetson, San Francisco and Los Angeles, Cal.
Lyon Conklin & Co., Baltimore, Md.

Will not warp like wood.

DREIS & KRUMP, Mfrs.,
3214 S. Halsted St., Chicago



Lightning Conductor Ground Rod

(Patented April 30, 1895.)

With Automatic Water Supply

The ground rod is the most important part of the rod. Sometimes the ground is perfectly dry, and the deeper the harder the ground is in some localities. By our invention you can be sure of two feet or more of water all the time in the rod and moist earth around the point in the ground. It is made of ⅝-inch pure copper tube, and sells for 25c per foot; no more or no less. We want to furnish it to a responsible dealer in every town.

Write for Catalogue.

The Security Lightning Rod Co.
Burlington, Wis.

The **Dunlap Mfg. Co.,**
Dunlap, Iowa, write:
"We find much that is of interest and value to us in THE AMERICAN ARTISAN."

GEROCK BROS. MFG. CO.

Sheet Metal Ornaments and Statuary

Detail Work a Specialty. Ask for Catalogue.

1227 Manchester Ave., ST. LOUIS, MO.

Class C Punch

We build a complete line of Punches, Shears and Bending Rolls, all sizes up to 75 tons in weight, for Boiler, Bridge Structural and Sheet Iron Shops.

Bertsch & Co., Cambridge City, Ind.

It Is Acknowledged

PRICE

3½-in.	$ 50
4 "	60
4½ "	65
5 "	75
6 "	1 00

by the best workmen to be the only way to close the end of an eave trough, as corrugations are **Proof Against Frost.** Order a set of tools today from any jobber or tinner's supply house.

G. E. BISHOP, HARDWARE
DOWAGIAC, - MICH.

INDUSTRIES ARE OFFERED LOCATIONS

WITH

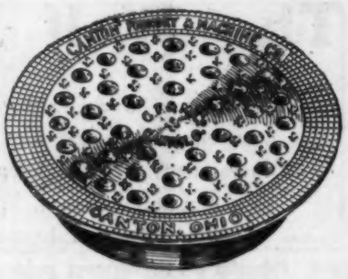
Satisfactory Inducements,
Favorable Freight Rates,
Good Labor Conditions,
Healthful Communities,

ON THE LINES OF

THE ILLINOIS CENTRAL R. R.
AND THE
YAZOO & MISSISSIPPI VALLEY R. R.

For full information and descriptive pamphlet address

J. C. CLAIR, Industrial Commissioner,
1 Park Row, CHICAGO.



Side Walk or Vault Castings Columns and Structural Work

Send us your specifications.

THE CANTON FDY. & MACHINE CO.
CANTON, OHIO
Founders, Machinists, Pattern Makers

"Genuine Worcester" Roofing Plates

Trade Mark M&E

The above well known brand will be found the same to-day as formerly. No deviation in the character and quality.

Get our prices.

MERCHANT & EVANS CO.

Philadelphia, New York, Brooklyn — Successors to MERCHANT & CO., Inc. Sole Manufacturers — Baltimore, Chicago, Kansas City

Mr. Dealer:

Have you ever considered the advantage of handling Canton Clothes Dryers? They are in demand in Apartment Houses, Hotels, Hospitals, Sanitariums, Reformatories, Public Buildings and Residences. A good field, Big profits, Quick returns. Do you want the agency for your city? Write quick. Catalogue tells all. Get one.

The Canton Clothes Dryer & Mfg. Co.
Office and Works: CANTON, OHIO
New York Office, 157 W. 23rd St. St. Louis Office, 1232 Olive St. Baltimore Office, 1529 Maryland Ave.

CHAS. SMITH CO., Chicago, Ill., write: Kindly take out our advertisement for practical furnace men as we have more answers than we can take care of. 6-14-5

Do you want Absolute Fire Protection

Do you want a window that will positively stand every test? Are you willing to spend 2c and five minutes to find out the positive truth about

Mullins Fire Proof Windows

They actually do what no other windows can do—and are approved by the National Board of Fire Underwriters.
Shall we send you our catalogue, and quote you prices?

The W. H. Mullins Co., 209 Franklin St., Salem, O.

Also manufacturers of Skylights, Ornamental Metal Work, Statuary and Stamped Metal Work of all kinds.

1905 Ocean Wave Washer

With Covered Gear

You want the exclusive agency?
WRITE US.

VOSS BROS. MFG. CO.
Davenport, Iowa

MAKE MORE MONEY

Rural Routes are going in all around you. You can get this business with the **SIGNAL MAIL BOX**

It is the original box for Rural Routes with special endorsements of Postmaster General. • The best made, the best liked, the easiest sold and the best advertised.

SIGNAL MAIL BOX CO.
106 Benton St., Joliet, Illinois

Blick No. 3 The Best Box
FOR RURAL FREE DELIVERY

BE JUST WITH CUSTOMERS

Sell them Blick No. 3 boxes. They are big ones, 6½x8½x 19 inches. Made of heavy galvanized steel. Painted green, the new Government color. Same shape and color as city boxes. Have Positive-Locking Flag Signal, Automatic Latch, Water-Tight Quality. Every box tested, every box right, every box warranted. They will get the business. You better get them. Order now.

$5.88 per Doz.

BLICK-WILLIAMS CO.
INDIANAPOLIS, IND.

"SEEING IS BELIEVING"

That's a fine argument if you have the goods that will bear inspection. **WE'VE GOT THE GOODS.**

Mr. Dealer:

Send a trial order to your jobber or us direct for a

Schroeder Roller Gearing Rotary Washer

Then, after you have looked it over and find it not what **we** claim, i. e., the **best** constructed, the **handsomest** finished and the **lightest** working rotary washer, you needn't keep it. **That's fair—isn't it.**

Benbow-Brammer Mfg. Co.,
St. Louis, Mo.
The Pioneer Washing Machine Manufacturers.

Stop and Think!

6,000

live hardware dealers find the White Lily Washing Machine the best washer and best seller on the market.

If you have not got a reserved seat on the band wagon, you had better write to-day.

White Lily Washer Co.
Toledo, Ohio Davenport, Iowa

SOMETHING NEW

IMPERIAL ROTARY WASHER

Has sliding cylinder on square steel post, insuring greatest strength of any rotary gearing. Has *all steel roller bearings* making it NOISELESS, speedy and easy to turn.

Handsomely finished. All castings are in Gold and Aluminum Bronze. Extra large tub with plenty of room for Wringer.

Hardware men will search long to find a machine equal to our Ball-bearing Imperial Rotary as a seller.

With its many improvements it is a good investment for both dealer and user. Write us for Catalogue and we will show you the most complete line of Washers in the market.

THE BLACKSTONE MANUFACTURING COMPANY, Jamestown, New York
Oldest and largest makers of Washing Machines in the United States. Established 1871.

STEEL SPIDERS

Will warp out of shape, and scorch and burn food, like fry pans and skillets, if not made full weight like the genuine "NEVER-BREAK" STEEL SPIDERS

Ask for "FRENZIED COOKERY" blotter.

Write for catalogue of full line of "NEVER-BREAK" seamless steel cooking utensils. Also prices on Shovels, Spades and Scoops, "ALASKA" snow shovels, "TROPIC" furnace shovels and "KLONDYKE" sidewalk cleaners.

THE AVERY STAMPING CO.

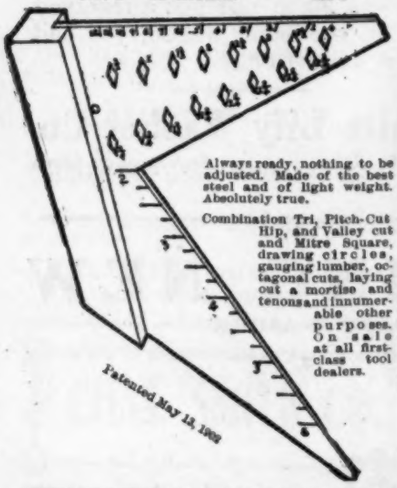
CLEVELAND, OHIO

Sole Mfrs. "NEVER-BREAK" GOODS

New Universal Square

Made in Three Sizes

No. 1	6 inches	$0.65
No. 2	10 inches	1.00
No. 3	13 inches	1.50



Always ready, nothing to be adjusted. Made of the best steel and of light weight. Absolutely true.

Combination Tri, Pitch-Cut Hip, and Valley cut and Mitre Square, drawing circles, gauging lumber, octagonal cuts, laying out a mortise and tenons and innumerable other purposes. On sale at all first-class tool dealers.

THE DUBY & SHINN MFG. CO.

INCORPORATED

Nelson Bldg., 19 Park Place, New York City

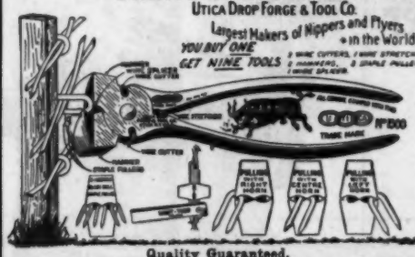
(Please mention The American Artisan.)

UTICA FENCE TOOL & BUTTON PLYER STAPLE PULLER

UTICA DROP FORGE & TOOL CO.

Largest Makers of Nippers and Plyers in the World

YOU BUY ONE GET NINE TOOLS



THE UTICA BLACK BULL IS THE LEADER.

QUALITY GUARANTEED.

The only staple puller with THREE pulling points. Pulls bottom wires equally as well as top wires.

The Centre Grip pulls the STAPLE straight.

We make the most complete line of Nippers and Pliers in the world.

Write for GREEN BOOK.

Quality Guaranteed.

UTICA DROP FORGE & TOOL CO.

Factory Utica, N. Y. — 296 Broadway New York

THE ONLY FREEZERS MADE HAVING

Cedar Pails with Electric Welded Wire Hoops, Cans of Heavy Tin with Drawn Steel Bottoms, AUTOMATIC Tin Scrapers.

"Lightning"

"Blizzard"

AMERICAN TWIN FREEZER

Freezes Two Flavors at One Time.

Your Trade Wants It.

"American Twin"

THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work.

SOLD BY LEADING JOBBERS. CATALOG SENT FREE.

North Bros. Mfg. Co., Philadelphia.

CUT THIS OUT

To the Publisher **The American Artisan and Hardware Record**

69 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

NAME .....

ADDRESS .....

TOWN .....

STATE .....

Magic Pattern Rule — Will Lay Out Patterns

for any size and angle of elbows in three minutes' time. Can also be used as Straight-edge Rule, Circumference Rule and Trammel. Should be in every Tinshop. Will save its cost in a few weeks. Thousands are in use and every one giving excellent satisfaction.

Price, complete in a nice wooden box with Chart, $4.00 net cash.

LUFKIN RULE CO., Saginaw, Mich.

(Mention THE AMERICAN ARTISAN.)

This Label on all Taplin's Pat. Improved **Dover Egg Beaters** stands for **Quality and Durability.**
THE TAPLIN MFG. CO., New Britain, Conn., U.S.A.
165 Chambers St., New York.

"PULLMAN" Screen Door Check

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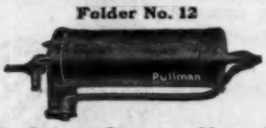


Works Like a Charm—Never Fails

Material and workmanship highest grade. Low in Price.

"If it's 'PULLMAN'—it's right."

PULLMAN MFG. CO., Rochester, N.Y., U.S.A.

CHICAGO
To MILWAUKEE
GRAND RAPIDS
MUSKEGON and
GRAND HAVEN

City Ticket Office 103 Adams St.
Decks Foot of Michigan Avenue

For the Hardware Trade

A YOUTH'S

MANUAL TRAINING BENCH

is an Article That Can't Be Beat. A Useful Article in Any Home. A Perfect Gift for the Boy.

THE SAME BENCH WE FURNISH THE BEST MANUAL TRAINING SCHOOLS

Strictly high grade in every respect. Sold at a price that places it within the reach of all. It sold like "hot cakes" last Christmas. Get it on your list for this year. Write for full information and prices.

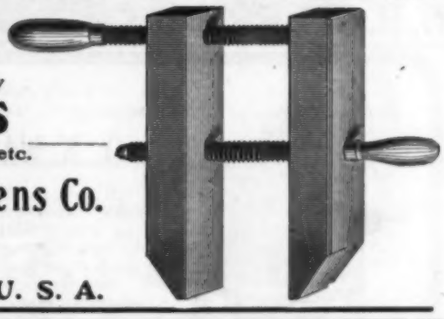
Grand Rapids Hand Screw Co.

160 South Ionia Street, GRAND RAPIDS. MICH.

Largest Manufacturers of Benches in the World.

HIGH GRADE HAND SCREWS, PLANES

Plumbs & Levels



Boxwood and Ivory

RULES

Yard Sticks, Gauges, etc.

The Chapin-Stephens Co.

UNION FACTORY
LOCK DRAWER 15

Pine Meadow, Conn., U. S. A.

Plane Perfection

Has been reached in the

"Ohio Adjustable"

Long years of experience in the manufacture of planes have enabled us to place upon the market a plane that is **CORRECTLY CONSTRUCTED** for **CORRECT WORK.**

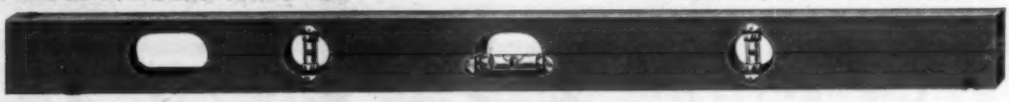
Let us send further information and our Catalogue. We have an extensive line of these planes and are constantly adding to it.

Our other **lines** are Wood Planes, Chisels, Gouges, Drawing Knives, Auger Bits, Bench and Hand Screws, etc. **NOTE:—We Do Not Sell Catalogue Houses.**

OHIO TOOL COMPANY

New York Office, J. C. McCarty & Co., 10 Warren St. Factories, Columbus, Ohio, Auburn, N. Y.

No. 25 Level, and One Plumb $50.00. **No. 35 Level, and Two Plumbs $60.00**



AKRON ECLIPSE LEVEL. Per Dozen $60.00

In introducing the above new Mason's Level, we are endeavoring to meet a demand from all parts for a Plumb Rule and Level which should embody the following points: **It must be light in weight; it must be four feet long; it must have two plumbs; it must have good hand grip; it must have glasses clearly exposed; it must be firmly set, but adjustable; it must be low in price.**

Don't you think we have met the demands? Write for discount.

THE BAKER-McMILLEN CO., Akron, Ohio, U. S. A.

STANLEY RULE AND LEVEL CO.

IMPROVED CARPENTERS' TOOLS

Sold by All Hardware Dealers **NEW BRITAIN, CONN.**

Get a Solid Foundation

Coal hods are built to work. They're made to carry loads. They've got to be strong, durable, well constructed.

Victor Coal Hods

are reinforced at the bottom. They are made to last. The construction is patented in the United States, Great Britain and Canada.

THE VICTOR STAMPING CO., BROADWAY LOVELAND, OHIO

SPERRY'S STEAM KETTLES

Made from very thick metal, without Stay Bolts, joint packed in such a manner as to never need repacking. A little higher priced than some, but they are safe and tight.

D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS **Batavia, Ill.**

We help you—by creating the demand and sending the trade to your store for

O. K. WASHING MACHINES

The O. K. Washing Machine is **good in every detail**, and we're telling our story in several of the widely read Farm Journals.

In all of our advertisements we say "Your Dealer has the O. K."

It's to your interests to sell the O. K. and meet the rapidly growing demand.

You'll find our booklet and prices interesting.

H. F. BRAMMER MFG. CO., Davenport, Iowa

A Seasonable Article **For this Fall & Winter**

The 20th Century White Flame
HEAT & LIGHT IN ONE

Wholesalers Are Placing Their Orders Now To Insure Supply for the Fall and Winter Demand.

GAS BURNERS GIVING HEAT AND LIGHT

At Cost of LIGHT ONLY.

FITS ANY GAS FIXTURE—HEATS AND LIGHTS ANY ROOM.

RETAILS AT **$1.25**—*Good Margin for Jobber and Retailer—Big Seller.*

For fuller particulars, address,

20TH CENTURY MFG. COMPANY, 19 Warren Street, N. Y.

Manufacturers of the Famous Bicycle and Automobile Headlights

MANUFACTURERS

Write us for information about Good Locations in Alabama, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Southern Illinois, Southern Indiana, Tennessee and Virginia, in the territory of the

SOUTHERN RAILWAY AND MOBILE & OHIO RAILROAD

For your industry. We have advantageous locations for almost every sort of

MANUFACTURING PLANT

Where conditions of Production and Distribution are favorable. We have the Iron, Steel, Timber, Fuel, Transportation Facilities, Markets. No section surpasses ours.

M. V. RICHARDS.
Land and Industrial Agent
Washington, D. C.

CHAS. S. CHASE, Agent, 722 Chemical Building, St. Louis, Mo.

M. A. HAYS, Agent, 225 Dearborn Street, Chicago, Ill.

No Dust, No Dirt

Pleases everybody

Quick Seller

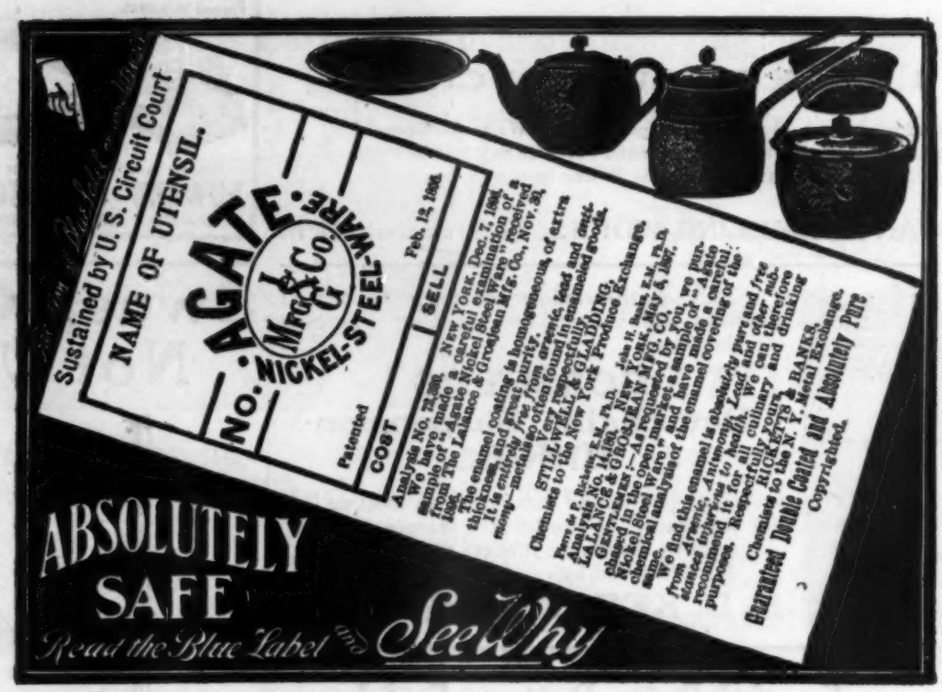
Order at once to insure prompt delivery.

Send for prices.

HILL DRYER CO.
Worcester, Mass., U. S. A.

H. DALLMAN, Clinton, Wis., writes:

"THE AMERICAN ARTISAN is the very best Paper published of its kind, and I would not be without it."



SOMETHING BETTER

Than Silver Plate.

UTAH SOLID METAL

KNIVES, FORKS AND SPOONS

The same pure bright metal clear through—no plating to wear off. No experiment. They have stood the test of years, never failing to give satisfaction and will last a life time. Besides "Utah" Knives will cut. Write for further particulars and prices.

FARWELL, OZMUN, KIRK & CO.

Wholesale Distributors **ST. PAUL, MINN.**

BOOKS BY MAIL

THE Publisher of the American Artisan will take pleasure in supplying books of whatever character, at catalogue prices, prepaid by mail, to any address, on receipt of price. The following are lines specially represented:

SHEET METAL WORKING. THE FOUNDRY. THE WORKSHOP. HEATING AND VENTILATING. PLUMBING AND DRAINAGE. BICYCLE REPAIRING. THE STORE AND OFFICE.

DANIEL STERN, PUBLISHER and BOOKSELLER 69 DEARBORN ST., CHICAGO

WE SOLICIT YOUR ORDERS FOR

GENUINE PORCELAIN ENAMELING

of all kinds and in all colors on steel sheet and cast iron.

JOB WORK IS OUR SPECIALTY

therefore we can give you prompt service. We make **Special Enamels** to suit your requirements. It will pay you to write us when you have any work done in our line.

MICHIGAN ENAMELING WORKS, Kalamazoo, Mich.

HOTCHKISS CLIPPERS

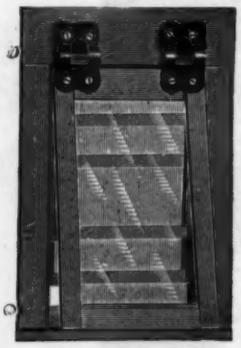
Standard Quality and Workmanship Guaranteed. Prompt Shipment. Prices Right.

Simple in Design. Elegant in Finish.

No. 75

Send for Descriptive Catalogue and Prices.

EDWARD S. HOTCHKISS,
IRANISTAN AVE., BRIDGEPORT, CONN.



Full length window screens keep out all the flies and protect the windows. Screens attached with

GOSSETT'S Detachable Suspension HINGES

are easily put up or removed—no tools or ladder necessary. Write for free sample pair.
Sold by Hardware Jobbers and Dealers.
Manufactured by

F. D. KEES, Beatrice, Neb.

Hardware Special Potts Pattern Sad Irons

The Hardware Special has a nickel-plated base, tops and handle bars and posts are finished in Bawer-Barff. The irons are standard weight and have the name in polished letters on top of each iron. They are not sold to Department Stores, Catalogue Houses, Rackett Stores, or houses who sell this trade.

The unbreakable handle furnished with these irons have the following points of merit over all other handles: They keep the hand cool, they do not hurt palm of hand, the wood handle is always cool. Handle is attached to upright posts by bolt.

Manufactured by

Schreiber & Conchar Mfg. Co., Dubuque, Iowa

PERSISTENT ADVERTISING

ONE who watches carefully the pages of general advertising mediums is struck by two things: the persistency with which those advertisers who are recognized as successful maintain their advertising week after week, month after month, and year after year; they never seem to abate their effort, and apparently the volume of their business increases steadily. The other thing noticeable is the large number of advertisers who thrust their announcements above the surface for a little while and then sink into oblivion. They either had not merit as a basis for their claims or they did not possess the skill to steer their enterprise successfully, or else they lacked the nerve to put forth proper effort. —ADVERTISING EXPERIENCE.

Sweep Out Not Up

A woman wants to clean things when she sweeps, not simply rearrange the dust. She scatters wet papers around to lay the dust before sweeping. That helps some but the

HARDIN DUSTLESS BROOM

eliminates the trouble entirely. Saturate the inside of the broom with kerosene or other liquid. Then sweep. You'll sweep out—not up. The handle can be detached from the broom proper and used over and over again with new brooms. This interchanging makes the Hardin Dustless Broom less expensive than even the ordinary, old-fashioned kind. Get circulars. We give exclusive agencies.

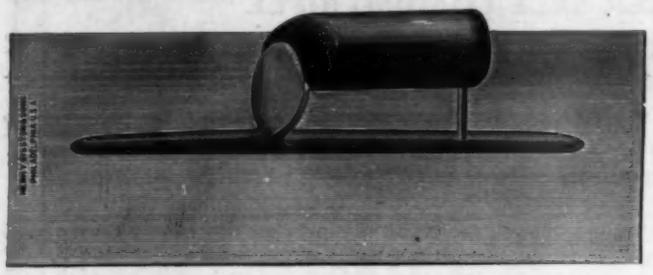
HARDIN DUSTLESS BROOM MFG. CO.
WEST LIBERTY, IOWA

Have You Subscribed?

Cement Tools

Quality Tells

The same careful workmanship and unflagging industry in the selection of materials, which have resulted in making the name of **DISSTON** famous in this and other continents, have been used in the construction of the



Western Plastering Trowel

It is made of the highest grade crucible steel tempered by our own improved method. The blade is accurately ground, extra thin. It is fastened with seven rivets to the long mounting, with shield. The end of the handle is beveled for thumb rest. **Easy, comfortable grip, strong and durable. Note reinforcing post at end of handle.**

WRITE FOR CATALOGS.

HENRY DISSTON & SONS, Inc.,

Keystone Saw, Tool, Steel and File Works, PHILADELPHIA, PA.

JUST OUT!

Rulofson's California Toaster

PATENTED

Makes beautiful golden brown toast. Heats rolls and biscuits to a nicety; substitute for a double boiler preventing scorching; an ideal bed warmer and carriage heater—better than a hot water bottle. The popular price (25c) at which it is sold commends it to all class of buyers. Large profits to jobbers and retailers. Advertised largely in many popular periodicals. WE PAY THE FREIGHT. Write for special prices and exclusive territory.

Retails 25c

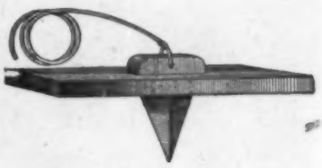
A. C. RULOFSON CO.

Sole Manufacturers and Patentees

CROSSLEY BLDG., SAN FRANCISCO, CAL.

Write for Our Circulars

and we will tell you what's doing in the Fence Anchor business.



The only Anchor made for between the posts and for corner posts.

LENAWEE MFG. CO.

ADRIAN, MICH.

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4 Trains a Day

via the

MONON ROUTE

CHICAGO INDIANAPOLIS & LOUISVILLE RAILWAY

and C. H. & D. Ry.

Only 8 Hours

from

CHICAGO

to

CINCINNATI

BY DAY, Parlor and Dining Cars
BY NIGHT, Palace Sleeping and Compartment Cars.

CHAS. H. ROCKWELL, Traffic Manager. FRANK J. REED, Gen. Pass. Agt.
200 Custom House Place, CHICAGO.

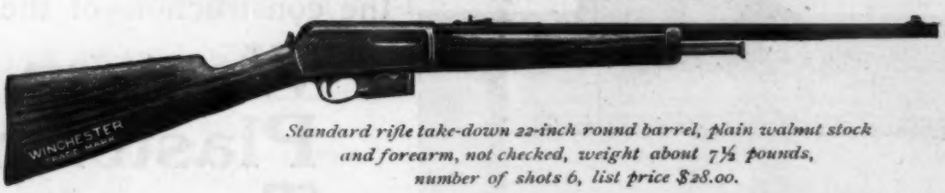
J. W. ROBISCH, Jefferson, Wis., writes: Thanking you for sending your valuable paper regularly, as I could not get along without it. Having recently branched out in the hardware business, your paper is more valuable than ever. 6-3-05

Now Ready. The

WINCHESTER

Model 1905

32 and 35 CALIBER SELF-LOADING RIFLE



Standard rifle take-down 22-inch round barrel, plain walnut stock and forearm, not checked, weight about 7½ pounds, number of shots 6, list price $28.00.

WE are now ready to fill orders through the regular trade channels for this rifle. It is the first rifle of the self-loading type made for center fire ammunition, and, as the cartridges it handles are desirable either for hunting or target practice, it is bound to be a ready seller. For this reason, and also because the big game hunting season is almost here, we urge the trade to place their orders at once for this rifle and the cartridges it handles. The cartridges this rifle handles are of the modern smokeless powder type, using metal patched bullets, and are furnished either full metal patched or soft point metal patched.

Soft point or full metal patched, list price per 1,000, $27.50.

Soft point or full metal patched, list price per 1,000 $27.00.

WINCHESTER REPEATING ARMS CO., NEW HAVEN, CONN.

HURWOOD

IT SELLS

HURWOOD MFG. CO., Bridgeport, Conn

Ely's Hay Dandy Knife

Will do the work of an extra man, thereby saving more than the price of it in one day, besides doing it easier than others. **Made on the right plan,** of malleable iron and steel, with oil-tempered Steel Knives. Combination hand and foot power. Ask your jobber for them. If he don't keep them write us.

Manufactured by

THEO. J. ELY MFG. CO.,

GIRARD, PA., U. S. A.

PETERS & HARVEY

MANTENO, ILL.

Write:

"You may discontinue our help wanted advertisement. We have received several replies and have engaged one of the applicants."

A CLEAN SHOT

One of the beauties of **PETERS** "Referee" shells is their clean way of bringing down game. They develop as much velocity and killing power as smokeless. Being loaded with Semi-Smokeless powder, they are extremely clean and do not foul the gun.

PETERS "League" loaded with black powder is the best shell of its grade on the market.

PETERS smokeless shells, "Ideal," "Target," "High Gun," and "Premier" are preferred and used with great success by multitudes of sportsmen in every section of the country.

PETERS Metallic Cartridges loaded with the famous Semi-Smokeless powder have attained a standard of quality and have won victories in the great championship matches, not approached by any other make. It therefore behooves

DEALERS IN AMMUNITION

to investigate these claims and take advantage of the business which Peters quality and Peters advertising are making.

If you are not handling this line at present, ask your jobber for full information or if you prefer, write us direct. It will pay you to put in a stock of Peters goods, the line that gives both profit and satisfaction.

THE PETERS CARTRIDGE COMPANY, Cincinnati, Ohio

NEW YORK, 98 Chambers St., T. H. KELLER, Manager

FLAT CRIMP EXPANDING ELBOWS

No. 1 — Round Corrugated, Plain Round

No. 2 — Octagon, Polygon

No. 3 — Square "H", Square "B"

PATENTED JUNE 4, 1895

Made of One Piece

None Genuine Without Signature

F. Dieckmann

Station B, CINCINNATI

Good Roofing Tin

That is **really good** sold at prices that enable you to **save** something—sometimes considerable—on your orders. It **will pay you** to write for sample and prices

The McClure Co.

Pittsburgh **Philadelphia**

NOTICE!

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and Continent. References furnished. Address

EXHIBIT & TRADING CO., Main Office, 72 Henry St., Liverpool, England

Sold the country over more than **20 Years!**

Tinners Find Employment
By advertising and using
THE POWERS AUTOMATIC CHIMNEY TOPS

They make chimneys draw, give Tinners employment making stocks, and give the dealers profit. Sold by Hardware Jobbers and Dealers.

Made only by
POWERS BROS.
STREATOR, ILL.
This cut free to dealers.

The "CENTENNIAL" RAIN-WATER CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single Cut-off made to fit CORRUGATED and Plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers. Patent applied for.

Manufactured only by
COONEY & GEIGER,
19 and 21 E. South St.
INDIANAPOLIS, IND.

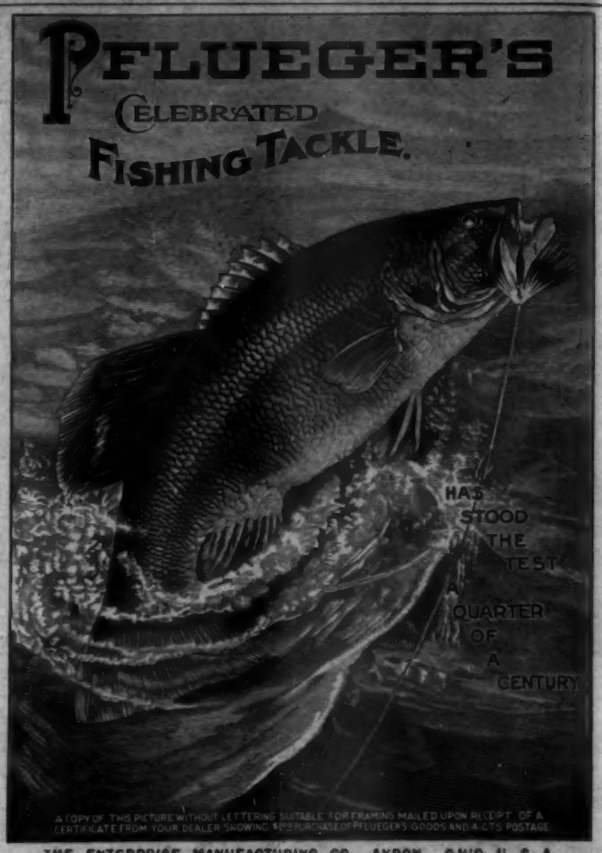
With our exceptional buying facilities we're able to buy galvanized sheets made to our own exacting specifications at less cost than you can buy run-of-market sheets.

Then, too, we make up Conductor Pipe and Eave Trough in very large quantities—always carrying an enormous stock on hand—and this means a saving also.

We give you the benefit—a better grade of Eave Trough and Conductor at a very attractive price.

Get our quotations!

ILLINOIS ROOFING & SUPPLY CO.,
23 Lake Street, Chicago.



THE ENTERPRISE MANUFACTURING CO., AKRON, OHIO, U. S. A.

Osgood Standard SCALES.

ASK YOUR JOBBER ABOUT THEM.

BRADLEY SHELF BRACKETS

STRONG, LIGHT AND ALL RIGHT

Atlas Mfg. Co., New Haven, Conn.

The "GLOBE" Ventilator

in BRASS, COPPER, GALVANIZED IRON, and with Glass Tops for Skylight purposes.

For Perfectly Ventilating Schools, Churches, Halls, Mills, Factories and Audience Rooms of Every Character.

SMOKY CHIMNEYS CURED.

"GLOBE" Ventilated Ridges.
Send for Pamphlet.

Manufactured by
GLOBE VENTILATOR CO., Troy, N.Y.

The Verdict

of the trade is practically unanimous in ascribing incontestable superiority to the **Atkins Celebrated High Grade Hand and Cross-Cut Saws.** Fifty years of experience, the finest of crucible steel, patent gas temper, improved methods of manufacture and expert workmanship are cardinal points of excellence in the make-up of an Atkins Saw. Every Atkins Saw sold from your store goes out as a silent but effective salesman for your whole line of goods. Atkins Saws are a profitable line to handle.

CATALOG AND DISCOUNT SHEET ON APPLICATION

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